

## Instructions and parts list for portable compressor XA(S)75 DdG with 110 V/50 Hz generator



Reg. code  
AIB XA Dd-32  
1990-06

To be filled in the ASL collection - binder 23 - under tab 69.

The following publications must always be delivered together with these instructions:

- Instruction book for portable compressor XA(S)75 Dd, Printed Matter No. 2920 1021 00 and Reg. code AIB XA Dd-30
- Parts list for portable compressors XA(S)75 Dd, Printed Matter No. 2930 1030 00 and Reg. code ASL XA Dd-31

### 1 General

The XA(S)75 DdG is a standard XA(S)75 Dd compressor with a built-in 3-kVA generator. The generator is V-belt driven from the engine crankshaft pulley. A cubicle (Fig. 4) with a voltmeter, ammeter, operating mode selector switch, differential relay, circuit breaker, a plug for 110 V/32 A outlet and two plugs for 110 V/16 A outlet is installed at the front side of the compressor. The electrical supply is protected by differential relay (F3-Fig. 4). The compressor may be loaded separately or simultaneously with the generator, depending on the position of the selector switch (S3-Fig. 4). When operating simultaneously, the maximum effective working pressure must not be more than 6 bar (87 psi).

### 2 Adaptations of the regulating system (Fig. 1)

A solenoid valve (Y6) is installed in the control line to the speed regulator (SR) to maintain the engine speed control lever (13) in the maximum position when using the generator.

### 3 Operation cycle (Fig. 4)

Three operating modes are provided depending on the position of selector switch (S3-Fig. 4).

| Switch position | Operating mode                                                                    |
|-----------------|-----------------------------------------------------------------------------------|
| OFF:            | only the compressor operates                                                      |
| 110 V/1x32 A:   | the generator (110 V/32 A outlet plug) and the compressor operate simultaneously  |
| 120 V/2x16 A:   | the generator (120 V/16 A outlet plugs) and the compressor operate simultaneously |

#### 3.1 Engine starting (Fig. 1)

When the engine is started, air is drawn in and pressure quickly builds up in receiver (AR). Air from the receiver enters throttle valve chamber (23) and speed regulator chamber (6) via loading valve (LV) and solenoid valve (Y6). Throttle valve (TV) closes the air intake and opens bleed-off valve (Vo). The engine is held at no-load speed.

#### 3.2 Compression starting (Fig. 1)

Selector switch (S3-Fig. 4) is in the **OFF** position

Pressing the loading valve (LV-Fig. 3) stops the supply of receiver

air to throttle valve chamber (23) and speed regulator chamber (6) and the pressure is vented to atmosphere via solenoid (Y6) and venting device (VD). Throttle valve (TV) opens, bleed-off valve (Vo) closes and speed regulator piston (7) moves to its maximum position so that the receiver pressure increases. If the air consumption starts before the pre-set working pressure is reached in the receiver, the compressor delivers its maximum air output. When the receiver pressure increases above the pre-set working pressure, the compressor unloads after all steps mentioned under "Capacity regulation" (described in the basic instruction book) have been completed.

#### 3.3 Simultaneous operation of compressor and generator (Fig. 1)

Selector switch (S3-Fig. 4) is in the **110 V/1x32 A** or **110 V/2x16 A** position

**When the compressor and generator are in operation simultaneously, the maximum working pressure(e) must not be more than 6 bar (87 psi).**

When selector switch (S3-Fig. 4) is switched to the **110 V/1x32 A** or **110 V/2x16 A** position, solenoid valve (Y6) is energized. The compressed air from speed regulator chamber (6) is released to atmosphere. Speed regulator piston (7) is moved to its maximum position by the receiver pressure in speed regulator chamber (9). The compressor and generator may be loaded. When the receiver pressure reaches the set maximum working pressure, regulating valve (RV) admits control pressure to throttle valve chamber (23) via loading valve (LV). Throttle valve (TV) starts closing the air intake. On reaching the unloading pressure, the air intake is closed. The compressor runs unloaded. The engine remains running at maximum speed and the generator remains loaded. On reaching the set working pressure, the throttle valve opens and the compressor is loaded again.

### 4 Operating instructions

#### Safety precautions

- The operator must apply all relevant safety precautions, including those mentioned on the inside of the cover of the basic instruction book.
- Earth the compressor by tapping the earth pin into the ground.

#### 4.1 Parking, towing and lifting instructions

See section 2.1 of the basic instruction book.

#### 4.2 Before starting

1. Before initial start-up or after a storage period of 3 months and longer, remove the flexible between the air filter and the unloader and pour 1 l (0.26 US gal) of oil into the compressor element via the unloader.
2. Before initial start-up, prepare the battery for operation if not already done so. See section 3.4 of the basic instruction book

3. With the compressor standing level, check the level of the engine oil. Add oil, if necessary, to the upper mark on the dipstick. Consult the Engine Manual for the type and viscosity grade of the engine oil.
4. Check the level of the compressor oil. The level gauge must be filled with oil. To add oil, see section 3.3 of the basic instruction book.
5. Check that the fuel tank contains sufficient fuel. Top up, if necessary. Consult the Engine Manual for the type of fuel.
6. Drain any water and sediment from the fuel filters until clean fuel flows from the drain cock.
7. Empty the dust trap of the air filter.
8. Check the air intake vacuum indicator. If the red part shows fully in the window, service or replace the filter element.
9. Attach the air lines to the closed air outlet valves.
10. Open the cubicle (Fig. 4) by means of its two snap clips (1) and check that the differential relay (F3) and circuit breaker (F2) are in position "I". Close the cubicle.

#### 4.3 Starting (Fig. 3)

1. Check that the selector switch (S3-Fig. 4) is in the OFF position. Earth the compressor by tapping the earth pin into the ground.
  2. Move toggle switch (S1) to "I" and check that alternator charge indicator lamp (H1) and alarm lamp (H6) are alight. Gauge (P1) indicates the fuel level.
  3. Press and keep override/start button (S2) pressed to override the shut-down circuit and to engage the starter motor.
  4. Alternator charging indicator lamp (H1) and alarm lamp (H6) go out within approx. 10 seconds from starting, depending on the operating conditions. Release override/start button (S2) as soon as both lamps (H1 and H6) are out.  
**If alarm lamp (H6) does not go out within 10 seconds from starting, stop the compressor at once and inspect its lubricating system.**
- Notes:**
- a. Wait a few minutes between each starting attempt.
  - b. If the engine fails to start three times, consult the Engine Manual to localize the cause and remedy.
  - c. For starting in extremely cold conditions, consult the Engine Manual.
5. Run the engine a few minutes at no-load to warm up. During this period, check the pressure on gauge (Gpw).

#### 4.4 Loading

1. The compressor may only be loaded when the engine is running smoothly.
2. **To load the compressor only:** push loading valve (LV-Fig. 3). Open the outlet valve(s) as soon as the unloading pressure registers on gauge (Gpw).
3. **To load both compressor and generator:**  
**Never use the generator with the compressor running in no-load condition.**
  - Push loading valve (LV-Fig. 3).
  - Adjust the effective working pressure (max. 6 bar) as described in section 4.1.1 in the basic instruction book.
  - Connect the electrical appliances to the correct outlet plug(s).
  - Turn selector switch (S3-Fig. 4) in the correct position, 110 V/1x32 A or 110 V/2x16 A.
  - Open the air outlet valve(s).

#### 4.5 During operation

**The side doors must be closed during operation and may be opened for short periods only, e.g. to carry out checks.**

Regularly carry out following checks:

1. The compressor oil level. Whenever the level gauge on the air receiver does not show any oil, stop the compressor and add oil as described in section 3.3 of the basic instruction book.
2. The air outlet temperature of the compressor element.
3. Air intake vacuum indicator. If the red part is full out, stop the compressor and service or replace the filter element.
4. The volt- and ammeter (3 and 2-Fig. 4).

#### 4.6 Stopping

1. Close the air outlet valves.
2. Turn selector switch (S3-Fig. 4) to the OFF position.
3. Let the engine run at minimum speed for a few minutes to allow temperatures to equalize.
4. Move the lever of contact switch (S1-Fig. 3) to position O. The compressor stops. The receiver pressure is released through blow-down valve (Vd-Fig. 1).
5. Disconnect the electrical appliances from the outlet plug(s) and pull out the earth pin from the ground.

#### 5 Testing of the differential relay (F3-Fig. 4)

The differential relay must be checked monthly for correct operation.

The relay can only be tested during operation of the generator. Beware of live circuits.

Open the cubicle (Fig. 4). Push down test button T; the relay must trip and the voltmeter indicate 0. Reset the relay and close the cubicle.

### 6 Principal Data

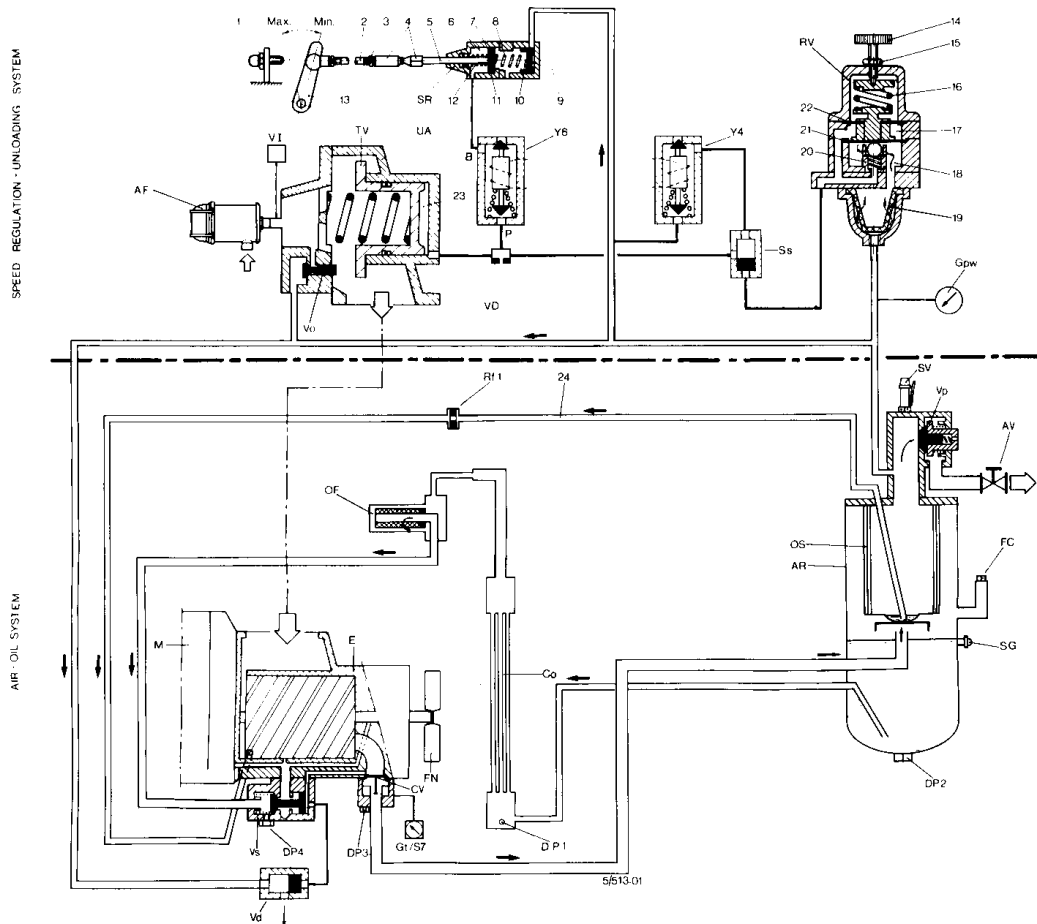
#### 6.1 Generator data

|                        |       |      |
|------------------------|-------|------|
| Rotor speed .....      | r/min | 3000 |
| Frequency .....        | Hz    | 50   |
| Generator power .....  | kVA   | 3    |
| Power factor .....     |       | 1    |
| Rated voltage .....    | V     | 110  |
| Number of phases ..... |       | 1    |

#### 6.2 Changes of compressor data with reference to the basic instruction book

**With both compressor and generator loaded:**

|                                       |     |     |
|---------------------------------------|-----|-----|
| Maximum (unloading) pressure(e) ..... | bar | 7   |
|                                       | psi | 102 |
| Normal working pressure(e) .....      | bar | 6   |
|                                       | psi | 87  |



|        |                                                   |      |                                      |     |                                          |     |                                        |
|--------|---------------------------------------------------|------|--------------------------------------|-----|------------------------------------------|-----|----------------------------------------|
| AF.    | Air filter, compressor and engine                 | M.   | Engine                               | 1.  | maximum speed of engine                  | 13. | Engine speed control lever             |
| AR.    | Air receiver/oil separator                        | OF.  | Oil filter                           | 2.  | Maximum speed screw, engine              | 14. | Adjusting wheel, working pressure      |
| AV.    | Air outlet valves                                 | OS.  | Oil separator element                | 3.  | Operating rod, speed regulator           | 15. | Check nut, adjusting wheel             |
| Co.    | Oil cooler                                        | Rf1. | Flow restrictor, oil scavenging line | 4.  | Check nut, ball joint                    | 16. | Spring                                 |
| CV.    | Check valve                                       | RV.  | Regulating valve                     | 5.  | Ball-and-socket joint                    | 17. | Upper chamber, control pressure        |
| DP1.   | Drain plug, oil cooler                            | SG.  | Oil level gauge                      | 6.  | Piston rod                               | 18. | Lower chamber, air receiver pressure   |
| DP2.   | Drain plug, air receiver                          | SR.  | Speed regulator                      | 7.  | Chamber, converted air receiver pressure | 19. | Filter, control air                    |
| DP3.   | Drain plug, check valve                           | SV.  | Safety valve                         | 8.  | Piston                                   | 20. | Ball with seat                         |
| DP4.   | Drain plug, oil stop valve                        | TV.  | Throttle valve                       | 9.  | Return spring, plunger                   | 21. | Steel membrane, lower                  |
| E.     | Compressor element                                | UA.  | Unloader                             | 10. | Chamber, air receiver pressure           | 22. | Steel membrane, upper                  |
| FC.    | Oil filler plug                                   | VD.  | Venting device                       | 11. | Plunger                                  | 23. | Chamber, control pressure              |
| FN.    | Fan                                               | Vd.  | Blow-down valve                      | 12. | Minimum speed screw, engine              | 24. | Scavenging line, oil separator element |
| Gpw.   | Working pressure gauge                            | VI.  | Vacuum indicator, air filter         |     |                                          |     |                                        |
| Gt/S7. | Compressor temperature indicator/shut-down switch | Vo.  | Bleed-off valve                      |     |                                          |     |                                        |
| LV.    | Loading valve                                     | Vp.  | Minimum pressure valve               |     |                                          |     |                                        |
|        |                                                   | Vs.  | Oil stop valve                       |     |                                          |     |                                        |
|        |                                                   | Y6.  | Solenoid valve for                   |     |                                          |     |                                        |

Fig. 1. Speed regulation-unloading and air-oil systems

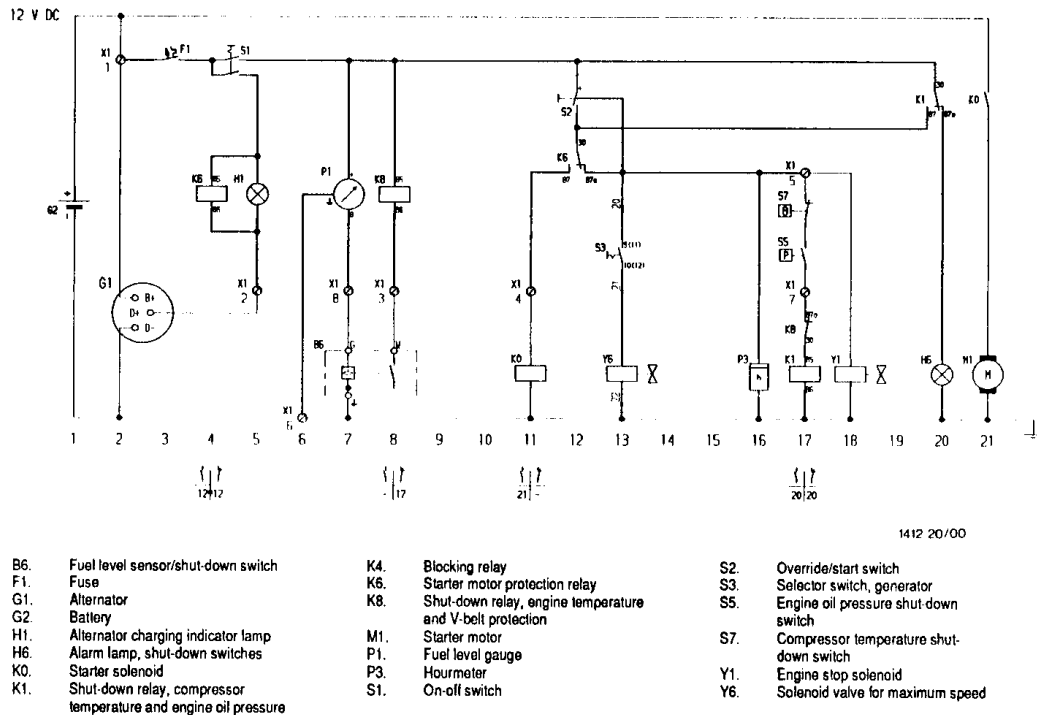


Fig. 2. Circuit diagram, compressor

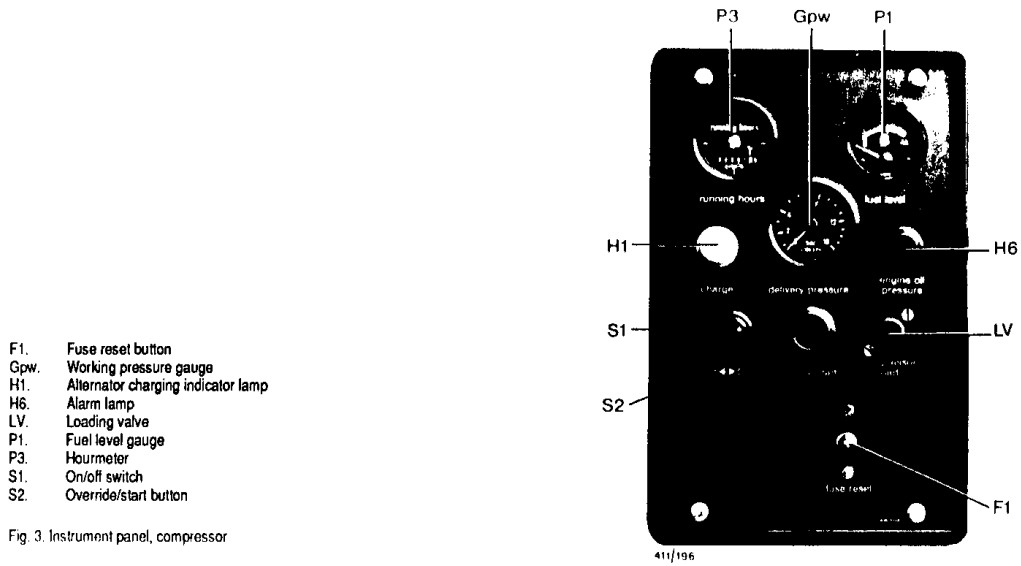
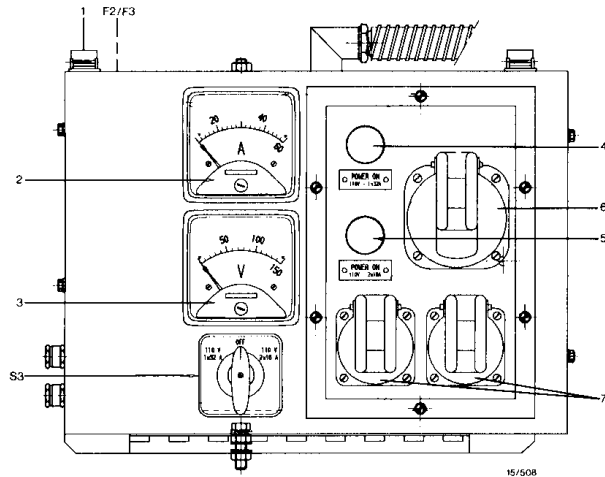


Fig. 3. Instrument panel, compressor



- F2. Circuit breaker (inside the cubicle)
- F3. Differential relay (inside the cubicle)
- S3. Selector switch, generator
- 1. Snap clips
- 2. Ammeter
- 3. Voltmeter
- 4. Power on indicator, 110 V/1x32 A
- 5. Power on indicator, 110 V/2x64 A
- 6. Outlet socket, 110 V 32 A
- 7. Outlet sockets, 110 V 16 A

Fig. 4. Cubicle of the generator

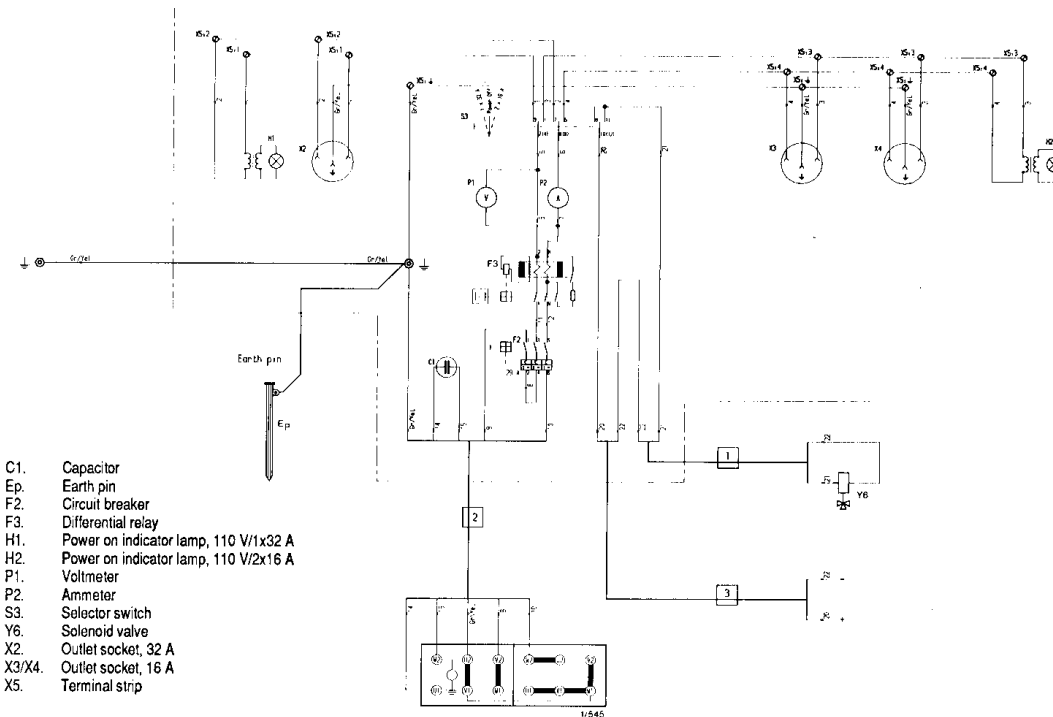
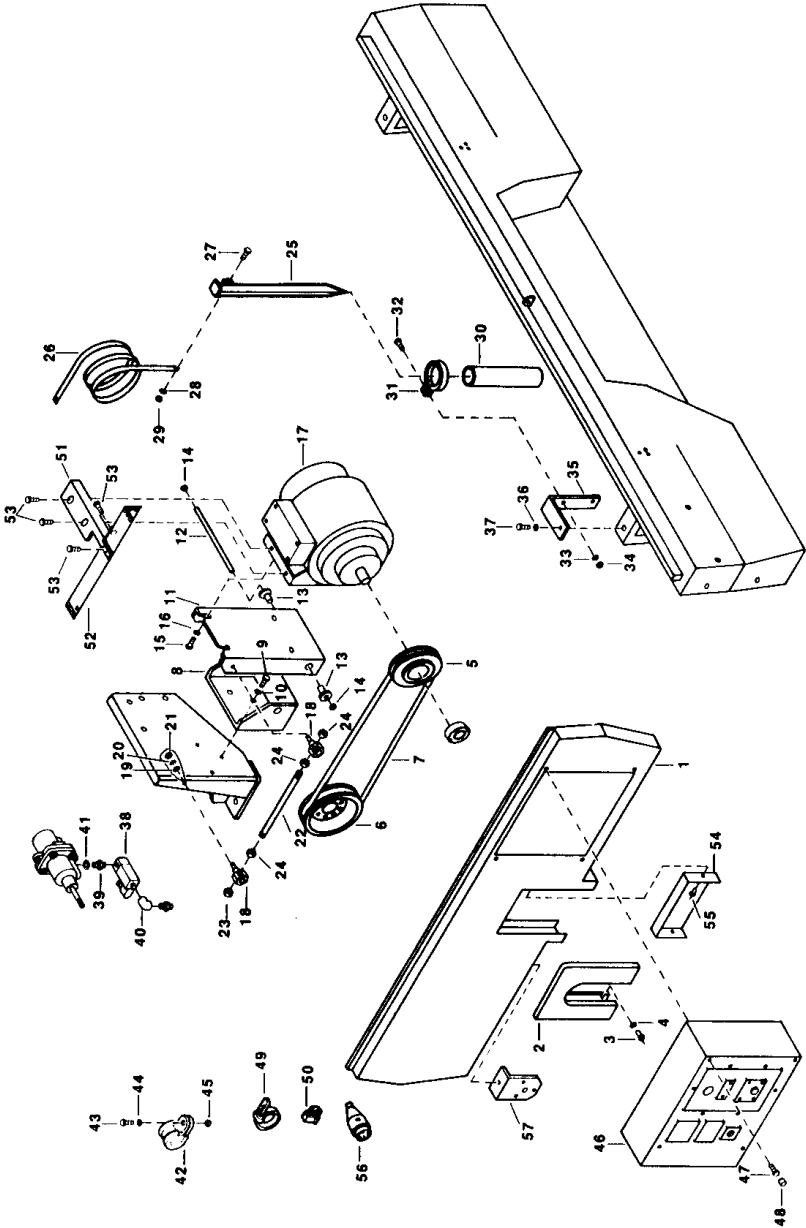


Fig. 5. Circuit diagram, generator



## 7 Parts list

### Instructions for use

| 1. Explanation about columns A-B-C-D                                                                                               |              |                                                     |
|------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------------------------------------|
| A                                                                                                                                  | 1613 2185 00 | Part number                                         |
| B                                                                                                                                  |              | Indication about assemblies and sub-assemblies e.g. |
|                                                                                                                                    | <b>Ref.</b>  | <b>A</b>                                            |
|                                                                                                                                    | 1            | 1613 2185 80                                        |
|                                                                                                                                    | 2            | 2989 0049 01                                        |
|                                                                                                                                    | 3            | 1613 2185 00                                        |
|                                                                                                                                    | 4            | 1613 2185 01                                        |
|                                                                                                                                    |              | •                                                   |
|                                                                                                                                    |              | •                                                   |
|                                                                                                                                    |              | ••                                                  |
|                                                                                                                                    |              | 1 comprises 2 and 3                                 |
|                                                                                                                                    |              | 3 comprises 4                                       |
| C                                                                                                                                  | 1)2)         | Footnotes on list                                   |
| D                                                                                                                                  | 3            | Quantity of parts                                   |
| 2. Ordering parts                                                                                                                  |              |                                                     |
| Always quote "Part number" and "Designation" of the desired parts as well as type designation and serial number of the compressor. |              |                                                     |

### Generator and accessories

Generator en toebehoren

Generator och tillbehör

Generator und Zubehör

Génératrice et accessoires

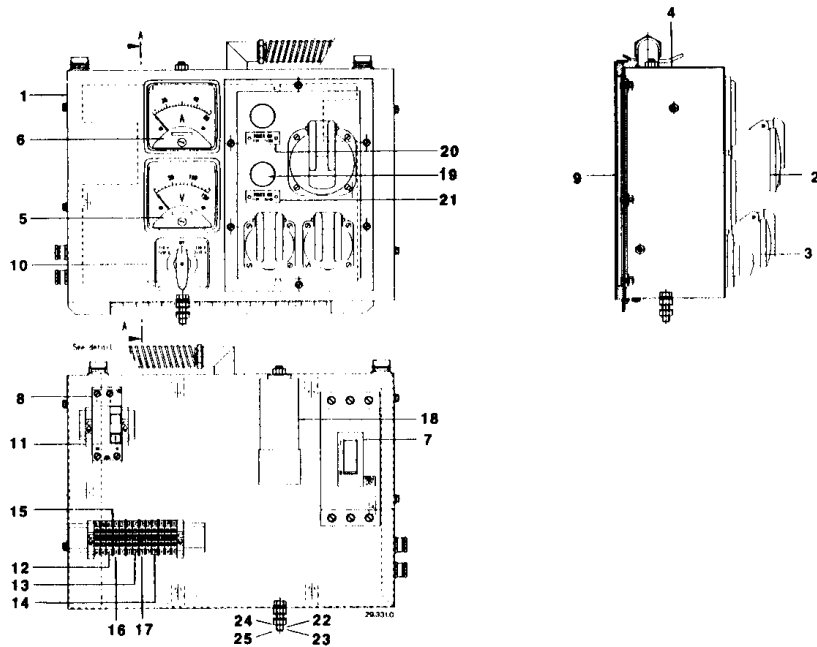
Generador y accesorios

| Ref. | A            | B | C  | D  | Designation | Ref. | A            | B | C | D | Designation    |
|------|--------------|---|----|----|-------------|------|--------------|---|---|---|----------------|
| 1    | 1202 9107 00 |   | 1) | 1  | Lower panel | 34   | 0266 2110 00 |   |   | 2 | Nut            |
| 2    | 1614 4367 00 |   |    | 1  | Guard       | 35   | 1612 4121 00 |   |   | 1 | Support        |
| 3    | 0129 3177 00 |   |    | 2  | Rivet       | 36   | 0300 8005 00 |   |   | 1 | Washer         |
| 4    | 0301 2321 00 |   |    | 2  | Washer      | 37   | 1619 5337 01 |   |   | 1 | Bolt           |
| 5    | 1202 9952 00 |   |    | 1  | Pulley      | 38   | 1089 0479 17 |   |   | 1 | Solenoid valve |
| 6    | 1202 9112 00 |   |    | 1  | Pulley      | 39   | 0603 4101 00 |   |   | 1 | Nipple         |
| 7    | 0367 0100 26 |   |    | 1  | V-belt      | 40   | 0560 0200 25 |   |   | 1 | Elbow          |
| 8    | 1202 9090 00 |   |    | 1  | Support     | 41   | 0653 1046 00 |   |   | 1 | Gasket         |
| 9    | 0147 1360 03 |   |    | 3  | Bolt        | 42   | 1613 0801 06 |   |   | 1 | Clamp          |
| 10   | 0301 2144 00 |   |    | 3  | Washer      | 43   | 0147 1247 03 |   |   | 1 | Bolt           |
| 11   | 1202 9091 00 |   |    | 1  | Support     | 44   | 0301 2321 00 |   |   | 1 | Washer         |
| 12   | 0248 9979 65 |   |    | 1  | Rod         | 45   | 0266 2108 00 |   |   | 1 | Nut            |
| 13   | 1202 9085 00 |   |    | 2  | Spacer      | 46   | ---          |   |   | 1 | Control unit   |
| 14   | 0291 1111 00 |   |    | 2  | Lock nut    | 47   | 1619 2766 00 |   |   | 4 | Bolt           |
| 15   | 0147 1323 03 |   |    | 4  | Bolt        | 48   | 1613 3672 00 |   |   | 4 | Cap            |
| 16   | 0300 8005 00 |   |    | 4  | Washer      | 49   | 1088 1301 02 |   |   | 5 | Cable tie      |
| 17   | 1089 0484 03 |   |    | 1  | Generator   | 50   | 1088 0830 09 |   |   | 8 | Cable clamp    |
| 18   | 1202 9092 00 |   |    | 2  | Stud        | 51   | 1613 5465 00 |   |   | 1 | Bracket        |
| 19   | 1202 9086 00 |   |    | 2  | Spacer      | 52   | 1613 5466 00 |   |   | 1 | Belt guard     |
| 20   | 0333 3227 00 |   |    | 2  | Lock washer | 53   | 1619 2766 00 |   |   | 4 | Bolt           |
| 21   | 0266 2110 00 |   |    | 2  | Nut         | 54   | ***          |   |   |   | Not used       |
| 22   | 0248 9979 65 |   |    | 1  | Rod         | 55   | ***          |   |   |   | Not used       |
| 23   | 0291 1111 00 |   |    | 1  | Lock nut    | 56   | ***          |   |   |   | Not used       |
| 24   | 0266 2111 00 |   |    | 3  | Nut         | 57   | ***          |   |   |   | Not used       |
| 25   | 1612 4084 00 |   |    | 1  | Earth pin   |      |              |   |   |   |                |
| 26   | 1612 4113 00 |   |    | 1  | Earth strip |      |              |   |   |   |                |
| 27   | 0147 1322 03 |   |    | 1  | Bolt        |      |              |   |   |   |                |
| 28   | 0301 2335 00 |   |    | 1  | Washer      |      |              |   |   |   |                |
| 29   | 0266 2110 00 |   |    | 1  | Nut         |      |              |   |   |   |                |
| 30   | 0070 8403 63 |   |    | AR | Hose        |      |              |   |   |   |                |
| 31   | 0346 0210 00 |   |    | 2  | Pipe clamp  |      |              |   |   |   |                |
| 32   | 0147 1325 03 |   |    | 2  | Bolt        |      |              |   |   |   |                |
| 33   | 0333 3227 00 |   |    | 2  | Lock washer |      |              |   |   |   |                |

1) To be lined with foam plastic / Te bekleden met schuimrubber /  
Skall kläs med skumplast / Auskleiden mit Schaumgummi /  
A garnir avec du caoutchouc mousse / Revestir de goma espuma  
**1619 2114 03 (AR)**

8059 2123 50 03  
01\_089\_0\_0\_1

Cubicle  
Kast  
Skáp  
Kasten  
Armoire  
Armario



| Ref. | A            | B | C     | D | Designation        | Ref. | A            | B  | C     | D | Designation       |
|------|--------------|---|-------|---|--------------------|------|--------------|----|-------|---|-------------------|
| -    | 1900 1004 13 |   | ..... | 1 | Control box        | 16   | 1089 0506 41 | •  | ..... | 2 | Jumper            |
| 1    | 1202 9108 80 | • | ..... | 1 | Control box        | 17   | 1089 0506 42 | •  | ..... | 3 | Jumper            |
| 2    | 1089 0535 04 | • | ..... | 1 | Socket             | 18   | 1089 0489 02 | •  | ..... | 1 | Capacitor         |
| 3    | 1089 0486 04 | • | ..... | 2 | Socket             | 19   | 1089 9076 21 | •  | ..... | 2 | Lampholder        |
| 4    | 0690 3401 41 | • | ..... | 1 | Data plate         | x    | 1091 0211 00 | •• | ..... | 1 | Lamp              |
| 5    | 1089 0487 03 | • | ..... | 1 | Voltmeter          | 20   | 1202 9655 01 | •  | ..... | 1 | Instruction plate |
| 6    | 1089 0488 04 | • | ..... | 1 | Ammeter            | 21   | 1202 9655 02 | •  | ..... | 1 | Instruction plate |
| 7    | 1089 9228 11 | • | ..... | 1 | Circuit breaker    | 22   | 0300 0275 13 | •  | ..... | 2 | Washer            |
| 8    | 1089 9289 01 | • | ..... | 1 | Differential relay | 23   | 0147 1957 34 | •  | ..... | 1 | Bolt              |
| 9    | 9820 1412 21 | • | ..... | 1 | Label              | 24   | 0333 3174 07 | •  | ..... | 1 | Lock washer       |
| 10   | 1089 9082 10 | • | ..... | 1 | Switch             | 25   | 0261 1090 08 | •  | ..... | 2 | Nut               |
| 11   | 1089 0506 30 | • | ..... | 4 | End bracket        |      |              |    |       |   |                   |
| 12   | 1089 0506 31 | • | ..... | 3 | Earth terminal     |      |              |    |       |   |                   |
| 13   | 1089 0506 01 | • | ..... | 4 | Terminal           |      |              |    |       |   |                   |
| 14   | 1089 0506 02 | • | ..... | 2 | Terminal           |      |              |    |       |   |                   |
| 15   | 1089 0506 21 | • | ..... | 4 | Terminal           |      |              |    |       |   |                   |

1900 1004 13 02  
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***Atlas Copco***

Reg. code  
AIB XA Dd-30  
1989-10

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**Instruction book for  
Portable compressor  
XA(S)75 Dd  
with Deutz diesel engine**

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From following serial number onwards: ARP-975 065

This instruction book describes how to handle and operate the subject machine(s) to ensure safe operation, optimum working economy and long service life.

**Read this book before putting the machine into operation** to ensure correct handling, operation and proper maintenance from the beginning. The maintenance schedule contains a summary of the measures for keeping the unit in good repair. The maintenance procedures are simple but must be carried out regularly.

Keep the book available for the operator(s) and make sure that the unit is operated and that the maintenance actions are carried out according to the instructions. Record all operating data, maintenance work effected, etc. in an operator's logbook available at Atlas Copco. Follow all applicable safety precautions, including those mentioned on the cover or on the first few pages of this book.

Repair operations should be performed by trained personnel, available at Atlas Copco Service Outlets, which should also be contacted if any further information is desired.

In all correspondence always mention the unit type and the complete serial number, shown on the data plate.

For all specific data not mentioned in the text, consult sections "Preventive maintenance schedule" and "Principal data".

**The company reserves the right to make changes without prior notice.**

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## 1 Leading particulars

### 1.1 General description

The XA as well as its XAS silenced versions are portable, single-stage, oil-injected screw compressors, built for a normal effective working pressure of 7 bar (102 psi).

#### Engine

The compressor is driven by an air-cooled diesel engine.

#### Power transmission

The power from the engine is transmitted to the compressor through a flexible coupling. The compressor coupling housing, which also houses the engine flywheel, is bolted to the engine block.

#### Compressor element

The compressor casing houses two screw-type rotors, mounted on ball and roller bearings. The female rotor is directly driven by the engine. One rotor drives the other. The male rotor has four lobes and the female rotor six flutes. Thus, the male rotor revolves at 1 1/2 times the speed of the female rotor. As compression takes place in all the lobe-flute spaces, pulsation-free air delivery is ensured.

Injected oil, mixing with the air, lubricates the rotors and seals between the rotor tips and the casing. This increases efficiency. The oil also absorbs compression heat.

#### Oil system

The oil is boosted by air pressure. The system has no oil pump.

The oil is removed from the air, first, in the receiver, second, through a separator element.

The receiver is provided with an oil level indicator and a safety valve.

#### Cooling system

The unit is provided with an oil cooler. The cooling air is generated by a fan. The female rotor directly drives the fan.

#### Speed regulation

The operation of the unit is governed by an automatic engine speed regulator and an unloader, both connected to a regulating valve.

#### Safety devices

A thermal shut-down switch protects the compressor against overheating. The air receiver is provided with a safety valve. The engine is protected against too low an oil pressure, V-belt failure and low fuel level.

#### Frame and axle

The compressor/engine unit is supported by rubber buffers on the frame and is equipped with an axle with rubber torsion springs.

The drawbar is provided with a retractable nose-wheel to support the unit when parked. The unit is equipped with an overrun brake mechanism and a parking brake.

#### Canopy

The canopy has openings for the intake and cooling air and doors for routine operations. The canopy of XAS is lined with sound-damping material. A lifting eye is under a small door in the roof panel.

The instrument panel grouping the pressure gauge, control switches, etc., is placed behind a small door.

A small toolbox is installed inside the canopy.

#### General

The compressor element is furnished with a data plate showing the type, serial number, maximum working pressure and maximum speed.

### 1.2 Air flow (Fig. 3)

The system comprises:

1. Air filter (AF)
2. Unloader (UA) with air intake throttle valve (TV)
3. Compressor element (E)
4. Check valve (CV)
5. Air receiver/oil separator (AR) with oil separator element (OS)
6. Minimum pressure valve (Vp) with non-return valve
7. Blow-down valve (Vd)

Air drawn through the filter into the compressor element is compressed. At the element outlet, compressed air and oil pass through the check valve into the air receiver/oil separator.

The check valve prevents blow-back of compressed air when the compressor is stopped. In the air receiver/oil separator, most of the oil is removed from the air/oil mixture; the balance is removed by the separator element. The oil collects in the receiver and in the bottom of the separator element.

The air leaves the receiver via the minimum pressure valve (Vp), which prevents the receiver pressure(e) from dropping below 4 bar (58 psi), even when the air outlet valves are open. This ensures adequate oil injection and prevents oil consumption. When the unit is stopped, the non-return valve of the minimum pressure valve prevents blow-back and the blow-down valve (Vd), fitted on the oil stop valve, depressurizes the air receiver (AR).

An air temperature indicator/shut-down switch (GI/S7) and a working pressure gauge (Gpw) are comprised in the system.

### 1.3 Oil system (Fig. 3)

The system comprises:

1. Air receiver/oil separator (AR)
2. Oil cooler (Co)
3. Oil filter (OF)
4. Oil stop valve (Vs)

The lower part of the air receiver/oil separator serves as oil tank.

Air pressure forces the oil from the air receiver/oil separator through the oil cooler, oil filter and oil stop valve to the compressor element.

The compressor element has an oil gallery in the bottom of its casing. The oil for rotor lubrication, cooling and sealing is injected through holes in the gallery.

Lubrication of the bearings is ensured by oil injected into the bearing housings.

The injected oil, mixed with the compressed air, leaves the

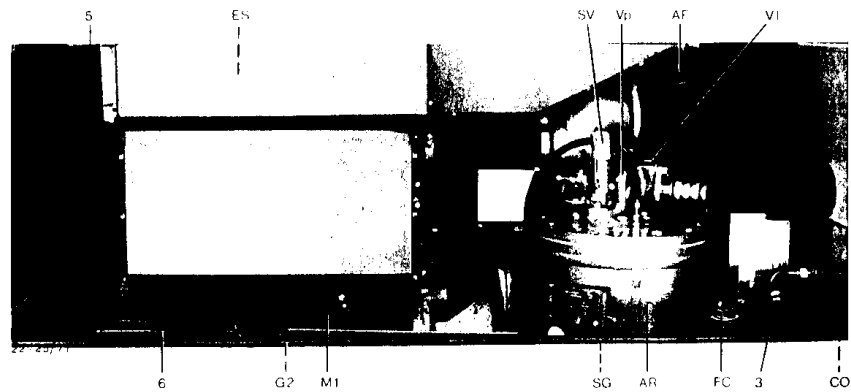


Fig. 1. L.H. side view

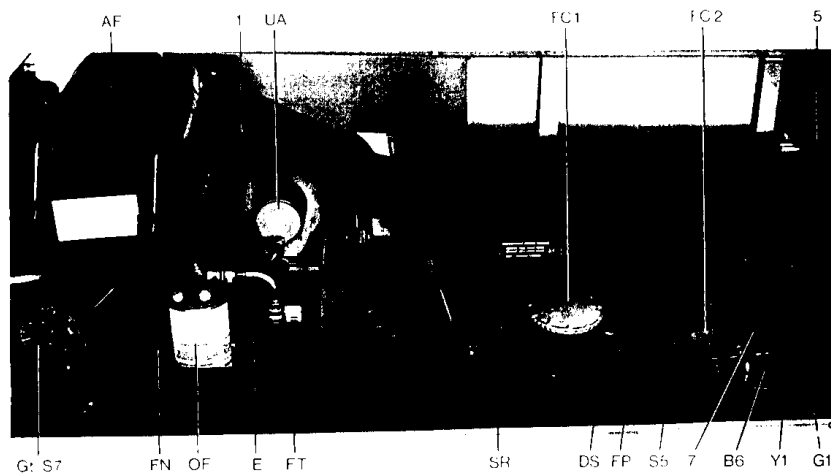


Fig. 2. R.H. side view

|     |                                           |        |                                            |     |                                      |     |                               |
|-----|-------------------------------------------|--------|--------------------------------------------|-----|--------------------------------------|-----|-------------------------------|
| AF. | Air filter                                | FC.    | Compressor oil filler                      |     | switch                               | UA. | Unloader                      |
| AR. | Air receiver/oil separator                |        | plug                                       | G1. | Alternator                           | VI. | Vacuum indicator, air filter  |
| B6. | Engine fuel level sensor/shut-down switch | FC1.   | Fuel filler cap                            | G2. | Battery                              |     |                               |
|     |                                           | FC2.   | Engine oil filler cap                      | M1. | Starter motor                        | Vp. | Minimum pressure valve        |
|     |                                           | FN.    | Fan, oil cooler                            | OF. | Oil filter                           | Y1. | Engine stop solenoid          |
|     |                                           | FP.    | Fuel lift pump                             | SG. | Oil level indicator                  | 1.  | Air intake pipe               |
| Co. | Oil cooler                                | FT.    | Fuel tank                                  | SR. | Speed regulator                      | 3.  | Hose, air receiver/oil cooler |
| DS. | Oil level dipstick                        | Gt/S7. | Compressor temperature indicator/shut-down | SV. | Safety valve                         | 5.  | Engine cooling blower         |
| E.  | Compressor element                        |        |                                            | S5. | Engine oil pressure shut-down switch | 6.  | Toolbox                       |
| ES. | Exhaust silencer                          |        |                                            |     |                                      |     |                               |

Figs. 1 and 2. L.H. and R.H. side views

compressor element through the check valve (CV) and re-enters the air receiver, where it is separated from the air as described in section 1.2. The oil that collects in the bottom of the oil separator element is returned to the system through the scavenging line (24), which is provided with a flow restrictor (Rf1).

The oil stop valve, bolted underneath the compressor casing, prevents the compressor element from flooding with oil when the unit is stopped. The valve is opened by discharge air when the compressor is started.

The oil filter by-pass valve opens when the pressure drop over the filter is above normal because of a clogged element. The oil then by-passes the element without being filtered. For this reason, it is imperative to replace the oil filter at regular intervals.

#### 1.4 Speed regulation and unloading system (Fig. 3)

The system comprises:

1. Regulating valve (RV)
2. Engine speed regulator (SR)
3. Unloader (UA)

When air consumption increases, the air receiver pressure will decrease and vice versa. This receiver pressure variation is sensed by the regulating valve, which, by means of control air to the speed regulator and unloader, matches the air output to air consumption. The air receiver pressure is maintained between the pre-selected working pressure and the corresponding unloading pressure.

The air output is controlled from maximum output (100 %) to no output (0 %) by:

1. Speed control of the engine between maximum load speed and unloading speed (the output of a screw compressor is proportional to the rotating speed)
2. Air inlet throttling

If air consumption is equal to or more than the maximum air output, the speed regulator holds the engine at maximum load speed and the throttle valve is fully open.

If air consumption is less than the maximum air output, the regulating valve supplies control air to the speed regulator and unloader to reduce the air output and keep the receiver pressure between the normal working pressure and the corresponding unloading pressure of approx. 1 bar (14.5 psi) above the normal working pressure.

When air consumption is stopped, i.e. when the unloading pressure is reached in the receiver, the throttle valve will have closed the air intake and the engine speed control lever will have moved to its minimum position. The engine runs at unloading speed.

When air consumption is resumed, the throttle valve gradually opens the air intake and the speed regulator increases the engine speed.

##### Control air

The construction of the regulating valve is such that any increase (decrease) of the receiver pressure above the pre-set valve opening pressure results in a proportional increase (decrease) of the control pressure to the speed regulator and the throttle valve.

Part of the control air is vented to atmosphere, and any condensate discharged, through the calibrated holes of venting devices (VD).

##### Loading valve

The system also comprises the loading valve (LV) fitted on the instrument panel. As long as the valve is not depressed when starting up, the engine and compressor are kept in no-load condition. The loading valve thus permits to warm-up the engine before loading the compressor.

##### Lubrication during no-load and unloading

Since pressure has to prevail at the element outlet to keep the oil stop valve open for lubrication also during no-load and unloading, throttle valve (TV) leaves an air passage in the closed position. This air is compressed and passed to the receiver. The same amount of air is bled off to the air inlet through bleed-off valve (Vo), by which the receiver pressure remains constant.

#### 1.4.1 Compressor operation cycle (Fig. 3)

##### Starting

**Initial condition:** engine speed control lever (13) at minimum, throttle valve (TV) open, loading valve (LV) released, minimum pressure valve (Vp) and outlet valves (AV) closed, pressure released from air receiver (AR) through open blow-down valve (Vd).

1. When the engine is started, air is drawn in and pressure quickly builds up in the receiver (AR). Blow-down valve (Vd) is immediately closed.
2. Air from the receiver enters throttle valve chamber (23) and speed regulator chamber (6), via loading valve (LV), and speed regulator chamber (9); throttle valve (TV) starts closing at a pressure(e) of approx. 1 bar (14.5 psi), speed regulator plunger (10) moves to its left position but the receiver pressure in chamber (6) holds piston (7) against the minimum speed stop (11) so that the engine is held at no-load speed.
3. When a pressure(e) of approx. 2.4 bar (35 psi) is reached, the throttle valve closes the air intake and opens bleed-off valve (Vo).
4. Air continues to be drawn into the compressor through the sealing surface between the throttle valve and its seat and is released again through the open bleed-off valve (Vo); the compressor and engine run at no-load condition at a receiver pressure(e) of approx. 2.4 bar (35 psi).

This condition prevails as long as the loading valve has not been depressed.

##### Compression starting

Pressing the button of the loading valve stops the supply of receiver air both to speed regulator chamber (6) and throttle valve chamber (23), and the pressure is vented to the atmosphere through device (VD); the throttle valve opens, bleed-off valve (Vo) closes, speed regulator piston (7) moves to its maximum position so that the receiver pressure increases. The loading valve remains in its position.

Minimum pressure valve (Vp) opens at a pressure(e) of approx. 4 bar (58 psi) and pressure builds up in the air outlet manifold.

If air consumption starts before the pre-set working pressure is reached in the receiver, the compressor will deliver its maximum air output. If the outlet valves are not opened, the compressor will unload after all the steps mentioned under "Capacity regulation" have been completed.

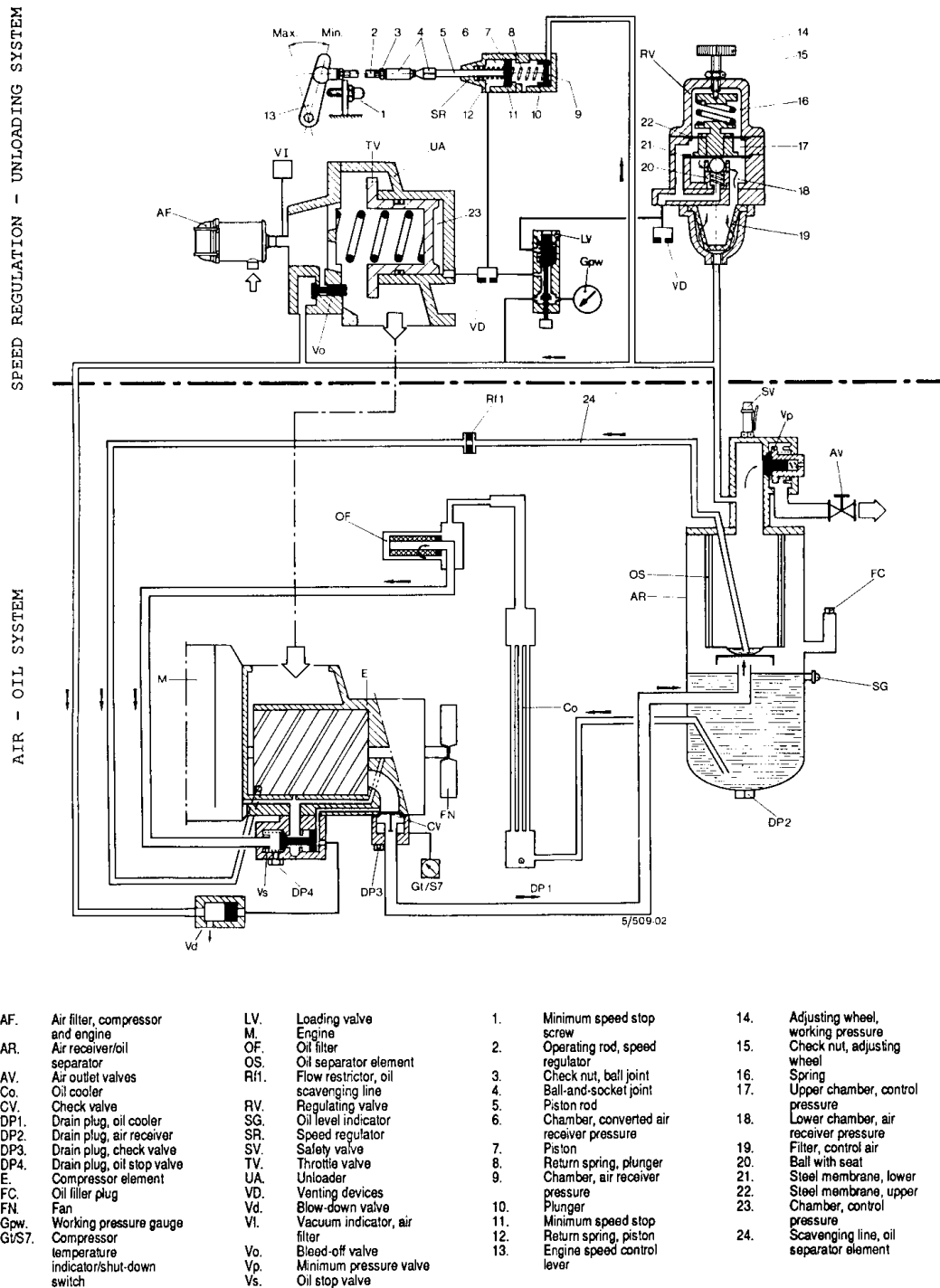


Fig. 3. Speed regulation-unloading and air-oil systems

**Capacity regulation**

1. At a receiver pressure of approx. 0.3 bar (4.5 psi) below the pre-set working pressure, regulating valve (RV) admits control pressure to the speed regulator and unloader, without any result. Part of the control air is vented to atmosphere, and any condensate discharged, through venting device (VD).
2. The control pressure increases proportionally to the increase of the receiver pressure. The speed regulator starts reducing the engine speed on reaching the pre-set working pressure.
3. At a slightly higher receiver pressure, throttle valve (TV) starts closing the air intake.
4. On reaching the unloading pressure, the engine has decelerated to its unloading speed and the air intake is closed by the throttle valve.

**Unloading**

When the throttle valve closes, bleed-off valve (Vo) opens and releases the air drawn into the compressor through the throttle valve sealing surface; the receiver pressure remains constant.

**Stopping**

When stopping the compressor with the outlet valves closed, the non-return valve of the minimum pressure valve (Vp) and the check valve close. Blow-down valve (Vd) opens. The receiver pressure escapes through bleed-off valve (Vo), blow-down valve (Vd), as well as through venting devices (VD).

## 1.5 Electrical system and shut-down switches

(Fig. 4)

The unit is equipped with a **negative earthed** system.

The pressure and temperature shut-down switches (S5 and S7), fitted on the engine and compressor, automatically stop the engine and thus prevent damage resulting from low engine oil pressure and high air/oil outlet temperature. A low fuel level shut-down switch

(B6) prevents air from entering the fuel system from an empty fuel tank.

Relay (K6) prevents damage to the starting motor when the starter button (S2) is depressed for too long.

### 1.5.1 Location and function of the shut-down switches

**Switch:** Compressor temperature (S7)  
**Location:** Sensing element at side of air outlet port of compressor element. Indicator scale and switch at R.H. side of instrument panel  
**Contact:** Normally always closed. Opens if air temperature rises above setting of switch  
**Result:** Engine stops

**Switch:** Engine oil pressure (S5)  
**Location:** Near engine oil filler cap.  
**Contact:** Closes at rising oil pressure. Opens if oil pressure drops below setting of switch  
**Result:** Engine stops

**Switch:** Fuel level (B6)  
**Location:** Fuel tank  
**Contact:** Normally always open. Closes if fuel level becomes too low  
**Result:** Engine stops

### 1.5.2 Operation of the electrical system

1. Closing on/off switch (S1) supplies voltage to:
  - charging indicator lamp (H1), which lights up
  - relay (K6), which makes contact (30-87), closing the line between switch (S2) and starter solenoid (K0)
  - alarm lamp (H6) which lights up

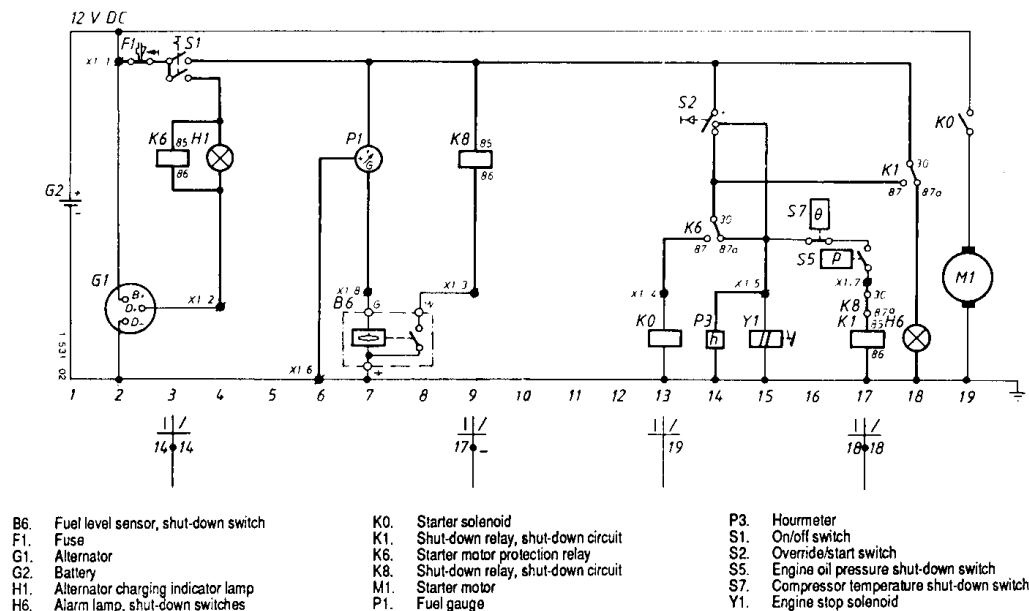


Fig. 4. Circuit diagram

2. **Depressing override/start switch (S2)** supplies voltage to:
  - engine stop solenoid (Y1) and hourmeter (P3), which respectively opens the engine fuel supply and starts counting
  - starter solenoid (K0) via relay (K6) contact (30-87). Solenoid (K0) engages the starter motor (M1), which cranks the engine
3. When alternator (G1) starts charging, its built-in voltage regulator de-energizes relay (K6) and extinguishes lamp (H1). Relay (K6) makes contact (30-87a), opening the line to solenoid (K0), the contact of which opens and disengages starter motor (M1).
4. After the engine oil pressure has built up sufficiently, engine oil pressure switch (S5) closes its contact, energizing relay (K1). Relay (K1) makes contact (30-87). Lamp (H6) goes out.
5. **Releasing override/start switch (S2)** interrupts overriding of the shut-down circuit. Solenoid (Y1), hourmeter (P3) and relay (K1) remain energized over relay (K1) contact (30-87) and over relay (K6) contact (30-87a).

#### Engine safety shut-down

1. If engine oil pressure switch (S5) or compressor temperature switch (S7) opens, relay (K1) will be de-energized, breaking contact (30-87) and making contact (30-87a); the stop solenoid is released, the engine stops and alarm lamp (H6) lights up.
2. The same thing happens when the fuel level switch (B6) closes, but in this case relay (K8) is energized and its contact (30-87a) breaks the circuit to relay (K1).
3. In case of alternator V-belt failure the alternator output will decrease and relay (K6) will be energized. Contact (30-87a) of relay (K6) opens, the stop solenoid is released and the engine stops.
4. Fuse (F1) will cut out if an overload occurs in the engine stop solenoid circuit or in case of short circuit. It can be reset after a short period of cooling off by pressing its push button.

## 2 Operating instructions

### Safety precautions

The operator is expected to apply all relevant safety precautions, including those mentioned on the inside of the cover of this book.

#### 2.1 Parking, towing and lifting instructions (Fig. 5)

1. When parking a unit, secure the nose-wheel (2) to support the unit in a level position. Pull up hand brake lever (4). Before towing the unit, make sure that the towing equipment of the vehicle matches the towing eye. The height of the towing device of the vehicle must be as follows:
  - on XA: 660 ±150 mm (26 ±5.9 in)
  - on XAS: 600 ±150 mm (23.6 ±5.9 in)
 Push hand brake lever (4) downwards and connect the break-away cable (3) to the vehicle. Secure the nose-wheel (2) in the highest position, so that the the nose-wheel is prevented from turning. When backing up the unit, the overrun brake mechanism is automatically neutralized.
2. Place the unit as level as possible; however, it can be operated temporarily in an out-of-level position not exceeding 15°. Locate the unit upwind, away from contaminated windstreams and walls. Avoid recirculation of exhaust air from the engine. This can cause overheating or engine power decrease.

3. When lifting the unit, the hoist must be placed in such a way that the unit, which must be placed level, will be lifted perpendicularly. Lifting acceleration and retardation must be kept within safe limits.

#### 2.2 Before starting

1. Before initial start-up or after a storage period of 3 months and longer, remove the flexible between the air filter and the unloader and pour 1 l (0.26 USgal) of oil into the compressor element via the unloader.
  2. Before initial start-up, prepare battery for operation if not already done so. See section 3.4.
  3. With the unit standing level, check the level of the engine oil. Add oil, if necessary, to the upper mark on the dipstick. Consult the Engine Instruction Manual for the type and viscosity grade of the engine oil.
  4. Check the level of the compressor oil. The pointer of the level indicator (SG-Fig. 1) should register in the green range. Add oil, if necessary. See sections 3.2 and 3.3.
- Warning:** Before removing the oil filler plug, make sure that the pressure is released (see section 3.3).

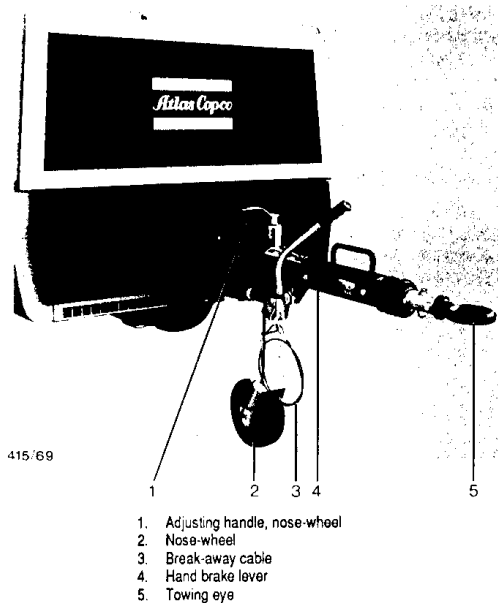


Fig. 5. Drawbar

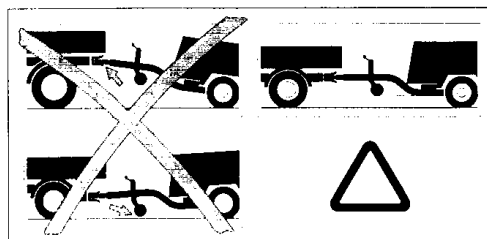
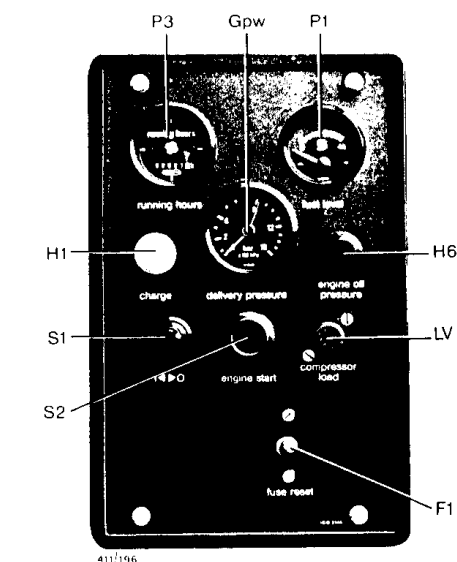


Fig. 6. Label on drawbar, towing instructions





|      |                                    |     |                       |
|------|------------------------------------|-----|-----------------------|
| F1.  | Fuse reset button                  | LV. | Button, loading valve |
| Gpw. | Working pressure gauge             | P1. | Fuel level gauge      |
| H1.  | Alternator charging indicator lamp | P3. | Hourmeter             |
| H6.  | Alarm lamp                         | S1. | On/off switch         |
|      |                                    | S2. | Override/start button |

Fig. 7. Instrument panel

- Check that the fuel tank contains sufficient fuel. Top up, if necessary. Consult the Engine Instruction Manual for the type of fuel.
- Drain any water and sediment from the fuel filter until clean fuel flows from the drain cock.
- Empty the dust trap of the air filter.
- Check the air intake vacuum indicator (VI-Fig. 1). If the red part shows in the window, service or replace the filter element.
- Check the electrolyte level in the battery. Top up, if necessary, with distilled water to just above the top of the lead plates. Check the battery terminals for cleanliness and tightness.
- Attach the air lines to the closed air outlet valves.
- Check that the engine stop lever (2-Fig. 9) is turned approx. 45° in the direction of the engine oil filler cap (FC2-Fig. 9).

### 2.3 Starting (Fig. 7)

- Move toggle switch (S1) to "I" and check that alternator charging indicator lamp (H1) and alarm lamp (H6) are alight.
- Press and keep override/start button (S2) depressed to override the shut-down circuit and to engage the starter motor.
- Alternator charging indicator lamp (H1) and alarm lamp (H6) go out within approx. 10 seconds from starting, depending on the operating conditions. Release override/start button (S2) as soon as both lamps (H1 and H6) are out.  
**If alarm lamp (H6) does not go out within 10 seconds from starting, stop the engine at once and inspect its lubricating system.**

#### Notes:

- Wait a few minutes between each starting attempt.
  - If the engine fails to start three times, consult the Engine Instruction Manual to locate the cause and remedy.
  - For starting in extremely cold conditions, consult the Engine Instruction Manual.
- Run the engine a few minutes at no-load to warm up. During this period, check the pressure(e) on gauge (Gpw).

### 2.4 Compression starting (Fig. 7)

- When the engine is running smoothly, press loading valve button (LV) and release it after a few seconds.
- As soon as the unloading pressure registers on gauge (Gpw), the unloader has unloaded the compressor.
- Open the outlet valve(s).

### 2.5 During operation

The side doors must be closed during operation and may be opened for short periods only, e.g. to carry out checks.

Regularly carry out the following checks:

- The compressor oil level. Whenever the level indicator (SG-Fig. 1) shows LOW, stop the unit and add oil (see section 3.3).  
**Warning: Before removing the oil filler plug, make sure that the pressure is released (see section 3.3).**
- That the regulating valve is correctly adjusted, i.e. starts decelerating the engine when reaching the pre-set working pressure in the receiver.
- The air outlet temperature (Gt-Fig. 2) of the compressor element.
- Vacuum indicator (VI-Fig. 1). If the red part is full out, stop the unit. If it remains full out, service or replace the filter element.

### 2.6 Stopping (Fig. 7)

- Close the outlet valves and run the unit unloaded for some minutes.
- Move toggle switch (S1) to "O".

## 3 Maintenance

### 3.1 Preventive maintenance schedule for the compressor

The schedule contains a summary of the maintenance instructions. Read the respective section before taking maintenance measures.

When servicing, replace all disengaged packings, e.g. gaskets, O-rings, washers.

**Some engine maintenance is also listed in the schedule. Refer to the Engine Instruction Manual for full maintenance.**

The "longer interval" checks must include the "shorter interval" checks.

| Period 1)        | Running hours 1) | Operation                                                                                                                              | Consult section | See note |
|------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------|
|                  |                  | <b>Before starting</b>                                                                                                                 |                 |          |
| Daily            | ----             | Check engine oil level .....                                                                                                           | 2.2             | --       |
| "                | ----             | Check compressor oil level .....                                                                                                       | 2.2             | --       |
| "                | ----             | Empty air filter dust trap .....                                                                                                       | 4.2             | --       |
| "                | ----             | Check air intake vacuum indicator. Service filter element if indicator shows red .....                                                 | 4.2             | --       |
| "                | ----             | Drain water and sediment from fuel filter, if necessary .....                                                                          | 4.6             | --       |
|                  |                  | <b>During operation</b>                                                                                                                |                 |          |
| "                | ----             | Check compressor oil level .....                                                                                                       | 2.5             | --       |
| "                | ----             | Check setting of regulating valve .....                                                                                                | 4.1             | --       |
| "                | ----             | Check air intake vacuum indicator. If red part is full out, stop unit. If it remains full out, service or replace filter element ..... | 4.2             | --       |
| "                | ----             | Check air outlet temperature of compressor element .....                                                                               | --              | --       |
|                  |                  | <b>At end of each day's operation</b>                                                                                                  |                 |          |
| "                | ----             | Fill fuel tank .....                                                                                                                   | --              | 1        |
| Weekly           | ----             | Clean unit externally .....                                                                                                            | --              | 2        |
| "                | ----             | Check electrolyte level and terminals of battery .....                                                                                 | 3.4             | 3        |
| "                | ----             | Check tyre pressure .....                                                                                                              | 6.5             | --       |
| "                | ----             | Inspect for fuel or oil leaks .....                                                                                                    | --              | --       |
| "                | 50               | Service air filter element .....                                                                                                       | 4.2             | 4        |
| Monthly          | ----             | Charge battery, if necessary .....                                                                                                     | 3.4             | --       |
| 3-monthly        | ----             | Clean oil cooler, if necessary .....                                                                                                   | 4.3             | --       |
| "                | ----             | Clean oil flow restrictor .....                                                                                                        | --              | --       |
| "                | ----             | Check safety valve by manually blowing air .....                                                                                       | --              | 5        |
| "                | ----             | Check wheel nuts for tightness .....                                                                                                   | 6.2             | --       |
| "                | ----             | Check brake system .....                                                                                                               | 4.8             | --       |
| "                | ----             | Grease towing eye shaft .....                                                                                                          | --              | --       |
| "                | ----             | Lubricate door hinges, locks, etc. ....                                                                                                | --              | --       |
| "                | ----             | Check engine speeds .....                                                                                                              | 4.1             | --       |
| "                | 400              | Drain water and sediment from fuel tank .....                                                                                          | 4.6             | 6        |
| Yearly           | ----             | Test safety valve .....                                                                                                                | 4.5             | --       |
| "                | ----             | Test air filter vacuum indicator .....                                                                                                 | --              | --       |
| "                | ----             | Test temperature and oil pressure shut-down switches .....                                                                             | 4.7             | --       |
| "                | ----             | Repack wheel bearings .....                                                                                                            | --              | 7        |
| "                | 500              | Replace fuel filter .....                                                                                                              | 4.6             | 8        |
| "                | 1000             | Change compressor oil .....                                                                                                            | 3.2/3.3         | --       |
| "                | 1000             | Replace compressor oil filter .....                                                                                                    | --              | 9        |
| "                | 1000             | Replace air filter element .....                                                                                                       | 4.2             | --       |
| "                | 1000             | Check operation of regulating valve, speed regulator and unloader .....                                                                | 4.1             | --       |
| "                | 2000             | Have pressure drop over oil separator element measured .....                                                                           | --              | 10       |
| "                | 3000             | Have the unit inspected by an Atlas Copco Service representative .....                                                                 | --              | --       |
| Recommendations: |                  | Keep the bolts of the bodywork, drawbar, axle, etc. securely tight .....                                                               | 6.2             | --       |
|                  |                  | Keep the wheel brakes properly adjusted .....                                                                                          | 4.8             | --       |

1) Whichever Interval comes first. The local Sales Company may overrule the maintenance schedule, especially the service intervals, depending upon the environmental and working conditions of the unit.

**Notes:**

1. Fill at the end of each day's operation. This prevents moisture from condensing on the inside walls of the tank and contaminating the fuel with water.
2. Clean with low-aromatic white spirits (stoddard solvents), with water and soap or by steam-cleaning.
3. More frequently in high ambient temperatures.
4. More frequently when operating in a dusty atmosphere.
5. Pull release lever with a gloved hand.
6. Drain until clean fuel flows from the drain cock.
7. Use ball bearing grease for the wheel bearings.
8. Replace the fuel filter regularly. Gummed or clogged filters mean fuel starvation and reduced engine performance. The quality of the fuel determines the frequency of filter renewal.
9. Use an oil filter as specified in the parts list. The part number is marked on the filter.
10. Replace element if pressure drop exceeds 0.8 bar (12 psi).

### 3.2 Oil specifications

#### Engine

Consult the Engine Instruction Manual for oil specifications, viscosity recommendations and oil change intervals.

#### Compressor

High-quality, mineral, hydraulic oil with rust and oxidation inhibitors and anti-foam and anti-wear properties is recommended. The viscosity grade should correspond to the ambient temperature and ISO 3448, as follows:

| Ambient temperature                        | Viscosity grade | Viscosity Index |
|--------------------------------------------|-----------------|-----------------|
| Consistently above 25°C (77°F) .....       | ISO VG 68       | Minimum 95      |
| Between 25°C (77°F) and -10°C (14°F) ..... | ISO VG 32       | Minimum 95      |
| Consistently below 0°C (32°F) .....        | ISO VG 15       | Minimum 95      |

Consult Atlas Copco for the recommended oils.

**Never mix oils of different brands or types.**

**Warning:** Use only non-toxic oils where there is a risk of inhaling delivered air.

### 3.3 Oil and oil filter change

The quality and the temperature of the oil determine the oil change interval. The prescribed interval is based on an oil temperature of up to 100°C (212°F) and normal operating conditions.

When operating in high ambient temperatures, in very dusty or high humidity conditions, it is recommended to change the oil more frequently.

**Change as follows:**

**Unscrew the oil filler plug only one turn. This uncovers a vent-hole, which permits any pressure in the system to escape.**

1. Remove the oil filter, e.g. by means of the handle of a spanner applied in the slot at the bottom.
2. Clean the filter seat on the manifold, taking care that no dirt drops into the system. Oil the gasket of the new element. Screw the element into place until the gasket contacts its seat, then tighten one half turn only.
3. Drain the oil, while the unit is warm, **by removing all drain plugs.**  
Drain plugs are provided on the air receiver/oil separator, oil cooler, oil stop valve and check valve. The two last-mentioned points are accessible after removal of the bottom panel underneath the compressor element. Screw out filler plug (FC-Fig. 1) to speed up draining. Tighten the plugs after draining.
4. Fill the air receiver/oil separator until the pointer of the level indicator (SG-Fig. 1) registers in the upper extremity of the green range. Take care that no dirt drops into the system. Reinstall and tighten the filler plug.
5. Run the unit at no load for a few minutes to circulate the oil. Stop and depressurize the unit. Screw out filler plug (FC), add oil until the pointer of the level indicator (SG-Fig. 1) registers in the upper extremity of the green range. Reinstall and tighten filler plug (FC). **Never add more oil.** Overfilling results in oil consumption.

#### Topping up with oil

1. **Depressurize the unit as described above.** Let the oil settle for a few minutes.
2. Screw out filler plug (FC-Fig. 1), add oil until the pointer of the level indicator (SG-Fig. 1) registers in the green range.
3. Reinstall and tighten the filler plug.

### 3.4 Battery care

Before handling batteries, read the concerned safety precautions and act accordingly. An ASB (Service Bulletin) dealing elaborately with batteries and due care is available on request.

Each battery delivered is dry-charged and needs to be made ready for use through activation. If the lapse of time between the production date and activation is less than 6 months, and the temperature is above 10°C (50°F), the battery is ready for use; if not, it needs to be recharged after activation. The production date is marked on the casing.

The battery must be in operation within 2 months from being activated; if not, it needs to be recharged first.

#### 3.4.1 Activating a dry-charged battery

- Battery and electrolyte must be at equal temperature above 10°C (50°F).
- Remove cover and/or plug from each cell.
- Fill each cell with electrolyte until the level reaches 10 to 15 mm above the plates, or to the level marked on the battery.
- Rock the battery a few times so that possible air pockets can escape; wait 10 minutes and check the level in each cell once more; if required, add electrolyte.
- Refit plugs and/or cover.

#### 3.4.2 Electrolyte

Electrolyte in batteries is a sulphuric acid solution in distilled water, the specific gravity of which must be 1.280 for moderate climatic conditions, 1.230 for tropical conditions. The solution must be made up before being introduced into the battery.

#### 3.4.3 Recharging a battery

Before and after charging a battery, always check the electrolyte level in each cell; if required, **top up with distilled water only.** When charging batteries each cell must be open, i.e. plugs and/or cover removed.

Use a commercial automatic battery charger according to its manufacturer's instructions.

Apply with preference the slow charging method and adjust the charge current according to the following rule of thumb: battery capacity in Ah divided by 20 gives safe charging current in Amp. The duration of charging depends upon the percentage of discharge. The battery can be considered charged when the specific gravity of the electrolyte, or the battery voltage, does not change in a period of 2 hours charging.

#### 3.4.4 Battery maintenance

- Keep the battery clean and dry.
- Keep the electrolyte level at 10 to 15 mm above the plates or at the indicated level; top up with distilled water only.

- Keep the terminals and clamps tight, clean, and lightly covered with petroleum jelly.

### 3.5 Storage

The oil film should be renewed, e.g. twice a week, by running the unit until warm. Load and unload the unit a few times to operate the unloading and regulating components. Close the air outlet valves after stopping.

If the unit is going to be stored without running it from time to time, protective measures must be taken as described in a separate Service Bulletin (ASB), which may be obtained on request.

**Note:** If the unit has been stored without running for a period of 3 months and longer, 1 l (0.26 US gal) of oil must be poured into the compressor element before starting.

### 3.6 SERVICE PAK

Offering you all the benefits of genuine Atlas Copco maintenance. Kits and service programmes provide for the right parts and maintenance for your compressor and engine. SERVICE PAK minimizes downtime and keeps your maintenance budget low. The order numbers of the SERVICE PAK kits are listed in the Atlas Copco Parts List (ASL). Contact your Atlas Copco representative.

## 4 Adjustments and servicing procedures

### 4.1 Adjustment of the regulating system

Make sure that the fuel injection system is properly vented and that the engine runs at maximum load speed at normal working pressure before attempting to adjust the speed regulator.

#### 4.1.1 Setting of the regulating valve

The tension of the spring (16-Fig. 3) in the regulating valve determines the working pressure. This tension can be increased to raise the pressure and decreased to lower it by turning the adjusting wheel clockwise and anti-clockwise respectively.

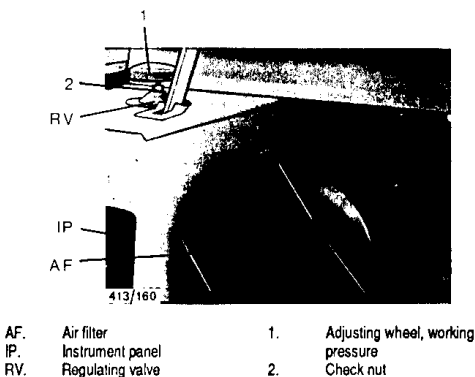


Fig. 8. Regulating valve and other components

To adjust the normal working pressure, proceed as follows:

1. Start and warm up the engine; load the compressor but do not open the outlet valves. Check the unloading pressure which should be approx. 0.7-1.3 bar (10-19 psi) above the normal working pressure. If the receiver pressure is less, loosen check nut (2-Fig. 8) and turn adjusting wheel (1-Fig. 8) clockwise, a fraction of a turn at a time, until the right unloading pressure is obtained.
2. Open an outlet valve just enough to maintain the normal working pressure in the air receiver. Check the engine speed. The engine should run at its maximum load speed.
3. While maintaining the normal working pressure in the air receiver, turn the adjusting wheel anti-clockwise, a fraction of a turn at a time, until the engine just starts decelerating. Next, turn the adjusting wheel 1/4 of a turn clockwise. Repeat the operation, if necessary, and lock the wheel with its check nut.
4. Close the outlet valve to decelerate the engine to its unloading speed. The engine speed control lever should be against the minimum speed stop screw.
5. Check the unloading speed. Adjust, if necessary, the unloading speed by means of the minimum speed stop screw (6-Fig. 9).

**Notes:**

1. Never operate the engine below its unloading speed.
2. Never exceed the maximum (unloading) pressure.

#### 4.1.2 Tune-up of the speed regulation

Is to be effected when the speed regulator has had to be removed or if the length of its operating rod has been disturbed.

**Procedure:**

1. Loosen check nut (2-Fig. 8) and fully screw down the adjusting wheel (1-Fig. 8).
2. Start and warm up the engine, but **do not load** the compressor.
3. Check the engine no-load speed. Adjust by means of the minimum stop screw (6-Fig. 9) to have the engine running at the specified speed.
4. Open an air outlet valve.
5. Load the compressor, then gradually close the outlet valve to get the normal working pressure in the air receiver. The speed regulator should now be full out and the engine should run at maximum load speed.
6. Check the speed regulator for air leaks. If excessive air leaks from the vent-hole in the bottom of the regulator, remove and dismantle it and replace the seal ring of plunger (10-Fig. 3) and its O-ring.
7. Check the engine maximum load speed. If it deviates, pull the ball-and-socket joint of the operating rod off the ball on the engine speed control lever. Move the lever to the maximum load speed position. Adjust the length of the operating rod by screwing the ball-and-socket joint up or down so that the socket just fits over the ball on the lever. Reconnect the ball-and-socket joint.
8. While maintaining the normal working pressure in the air receiver, gradually screw out the adjusting wheel until the engine just starts decelerating. Then turn the adjusting wheel approx. 1/4 of a turn clockwise. Tighten the check nut of the wheel.
9. Check the speed regulator for air leaks again. If air leaks from the vent-hole, remove and dismantle the regulator, and replace the seal ring of piston (7-Fig. 3) and its O-ring. Repeat step 8 after the regulator has been reinstalled.

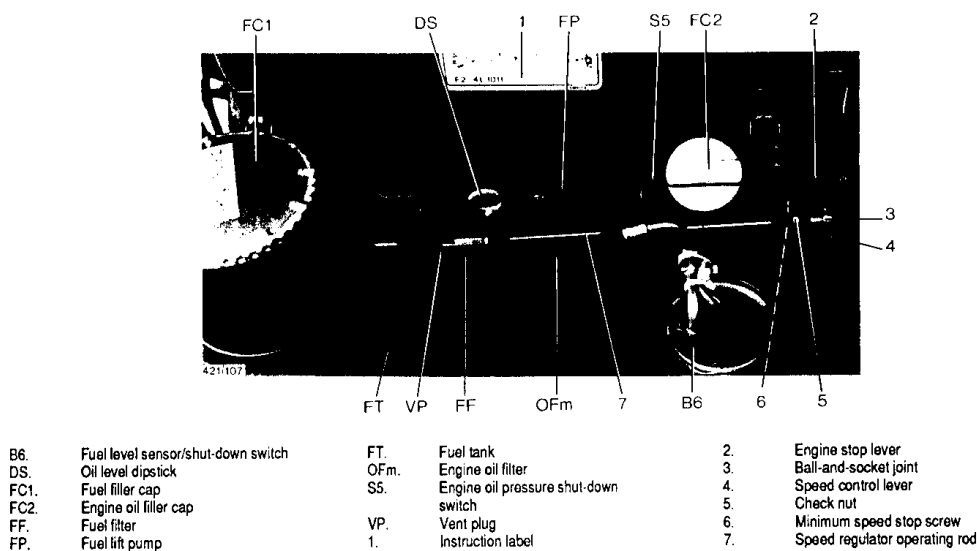


Fig. 9. Details on engine side

The regulating components are now synchronized and if the working pressure is to be altered, adjustment should be made by means of the adjusting wheel, as per section 4.1.1.

**Note:** The devices (VD) for venting the converted receiver pressure from the regulating valve are also used for discharging condensate from the loading valve and regulating components. The hoses running to the venting device situated in the T-piece of the flexibles between the loading valve, unloader and speed regulator should remain installed without sagging to prevent condensate from collecting, and possibly freezing, in the hoses after the unit has been stopped.

## 4.2 Air filter

All air passes through the dry-type paper element to remove dust before entering the compressor and the engine.

The filter is a combination of a cyclone type pre-filter equipped with a trap in which the dust collects, and a filter element.

The filter is provided with a vacuum indicator. Service the filter if the indicator shows completely red. Nevertheless, the filter is to be serviced or replaced at the prescribed intervals.

### 4.2.1 Recommendations

1. The indicator can be reset by pushing the knob in the extremity of the body.
2. Never remove the filter element while the compressor is running.
3. The filter element may be washed not more than three times.
4. For minimum compressor down-time, replace the dirty filter element by a new or cleaned one.
5. New filter elements must also be inspected for tears or punctures before installation.
6. Discard the filter element when damaged or torn.

### 4.2.2 Servicing (Fig. 10)

1. Release snap clips (7) and remove trap (6). Clean the trap.
2. Remove retaining nut (5) and withdraw the element (3) from housing (1).  
If the element must be serviced for immediate re-use, reinstall the dust trap to protect the air intake system while cleaning the element.
3. Reassemble in reverse order of dismantling.
4. Inspect and tighten all air intake connections.

### 4.2.3 Cleaning

#### Cleaning the dust trap (Fig. 10)

1. Release the two snap clips (7) that secure the dust trap to the filter body and remove the trap.
2. Pry off the plastic baffle (4) from the trap and empty the latter.

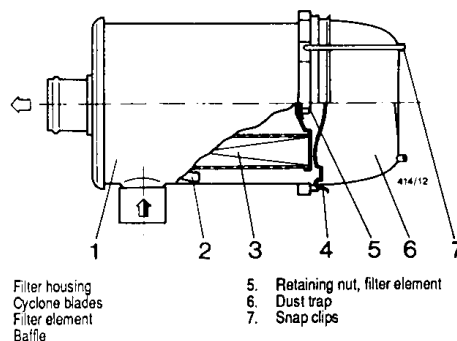


Fig. 10. Air filter

3. Clean the trap and baffle and reassemble them, taking care that the slot in the baffle fits over the stud of the trap.
4. Reinstall the trap on the filter body, with the side marked TOP upwards, and secure it with the clips.  
**Never use oil in the trap.**

#### Cleaning the filter element

Carefully knock the end faces on a flat surface to remove the dry contaminant. Never strike on a hard surface. Then blow dry air up and down the pleats in the reverse direction of normal flow with the jet oblique to the surface in direction of the folds; subsequently blow up and down the pleats on both sides of the element. The air pressure(e) may not exceed 5 bar (73 psi).

If the contaminant is oily, soak the element for 10 minutes in lukewarm water in which a non-foaming detergent is dissolved. A recommended detergent is MANN 053. Then move the element to and fro in the solution for 5 minutes.

Rinse with soft water until the drain water is clear. Let the element dry. Never use compressed air or heat to hasten drying.

Inspect the element by placing a light inside it. Spots or ruptures of the paper render the element unfit for further use.

### 4.3 Oil cooler

Keep the cooler clean to maintain cooling efficiency.

Remove any dirt from the cooler with a fibre brush. Never use a wire brush or metal objects. Then clean by air jet in reverse direction of normal flow.

If the dirt is oily, wash the cooler with fuel or a cleansing agent. A spray gun should preferably be used to apply the solvent to the fins. Rinse the block by means of a water jet after a soaking-in period. Steam-cleaning may also be applied.

Do not leave liquids behind.

If necessary, the cooler can easily be dismantled after draining the oil, removing the compressor rear plate and the baffle plate, and loosening the connections at the fan side. Always use a second spanner when removing the oil cooler to avoid external forces on the cooler.

**Note:** Protect the electrical and regulating equipment, air filters, etc. against penetration by moisture.

### 4.4 Air receiver

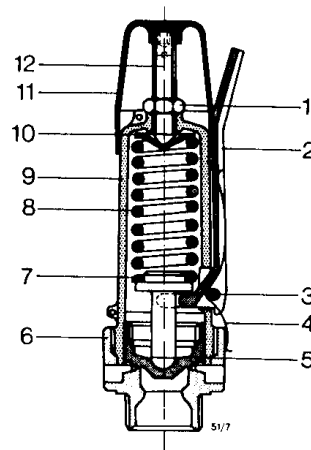
The air receiver is tested according to official standards. Have regular inspections carried out in conformity with local regulations.

### 4.5 Safety valve (Fig. 11)

Test the safety valve at least once a year. **All adjustments or repairs must be done by an authorized person.**

#### Testing

1. Start and warm up the engine.
2. Load the compressor and close the outlet valves.
3. Screw the adjusting wheel (1-Fig. 8) of the regulating valve gradually down while checking the working pressure. If the valve has not opened at the pressure specified in section 6.3, it must be adjusted.
4. If the valve opens at the specified pressure, re-adjust the working pressure as required, as described in section 4.1.



- |                 |                       |
|-----------------|-----------------------|
| 1. Lock nut     | 7. Lower spring seat  |
| 2. Lever        | 8. Spring             |
| 3. Lock pin     | 9. Valve housing      |
| 4. Lever spring | 10. Upper spring seat |
| 5. Valve        | 11. Cap               |
| 6. Valve seat   | 12. Setting screw     |

Fig. 11. Safety valve

**Note:** Testing the valve on the unit must take no longer than a few minutes.

### 4.6 Fuel system

The fuel filter assembly strains out water and impurities from the fuel.

The filter has an element, a drain cock and a vent plug fitted on the adapter head.

#### 4.6.1 Draining the fuel filter (FF-Fig. 9)

Loosen the vent plug and unscrew the drain cock one or two turns. Close the cock once the water has been separated. Retighten the vent plug.

The fuel system has a self-priming pump, so the system does not need to be vented manually.

#### 4.6.2 Replacing the fuel filter (FF-Fig. 9)

1. Unscrew the filter.
2. Clean the adapter head sealing surface, lightly oil the gasket of the new filter and screw it onto the header by hand. Next, securely tighten.
3. Check for fuel leaks once the engine has been restarted.

### 4.7 Testing the shut-down switches

#### Temperature shut-down switch

The mechanical condition of the compressor temperature shut-down switch (S7-Fig. 2) can be tested by immersing its sensing element in hot oil.

The contact of the compressor temperature switch should **open** at the temperatures specified in section 6.3. Test by means of an ohmmeter, or a test lamp with battery, and a thermometer. Stir the oil during testing.

The setting of the switch can be adjusted by means of a slotted screw protruding through the protecting glass of the temperature indicator scale (Gt-Fig. 2).

To prevent tampering, the screw bears a protecting cap with two holes. A key, supplied with the machine, can be applied through the holes in the slot to turn the screw until the switch trips at the specified temperature.

#### Engine oil pressure shut-down switch (S5-Fig. 2)

The engine oil pressure shut-down switch can be tested on a compressed air line by means of a pressure-reducing valve, small air receiver, pressure gauge and ohmmeter or a test lamp with battery. The contact of the switch should make and break at the specified pressures.

**Warning:** Test at regular intervals as the contact can remain stuck in closed position, without this being apparent, thus not safeguarding against too low an engine oil pressure.

**Note:** Test current not to exceed 1 A at 12 V.

## 4.8 Brake adjustment

### Brake shoe adjustment

Brake shoe adjustment re-establishes the brake lining-to-drum clearance and compensates for lining wear.

1. Jack up the axle until a wheel clears the floor. Support the unit on wooden blocks.
2. Disassemble the brake mechanism (Fig. 13).
3. While turning the wheel in the sense of forward towing, turn the brake adjusting nut (1-Fig. 12) clockwise until the brake shoes block the drum. Then back off the nut, with the wheel still turning in the same direction, until the drum rotates freely.
4. Repeat for the other wheel.
5. Adjust the brake cables as described.

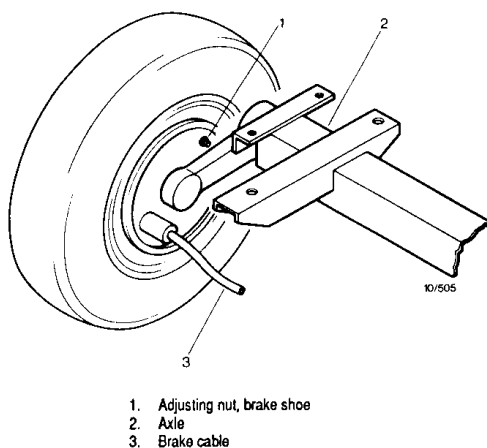


Fig. 12. Wheel assembly

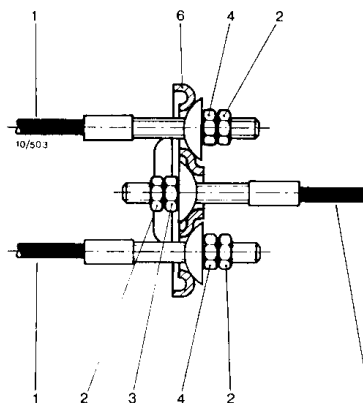


Fig. 13. Brake cable adjustment

### Brake cable adjustment

1. Assemble the brake cables (Fig. 13).
2. With the towing eye pulled out and the hand brake lever in the released position, screw up adjusting nut and brake cable nuts (3 and 4-Fig. 13) until there is no slack in the brake mechanism.
3. Apply the hand brake lever several times and repeat the adjustment. Tighten the nuts with their lock nuts. Remove the jack and the blocks.
4. Road-test the unit and brake several times. Then repeat steps 1 and 3 of the previous paragraph.

**Check procedure for brake adjustment:** The final check shall be carried out as follows:

1. Pull out the towing eye rod of the overrun brake mechanism in its outmost position.
2. Apply the hand brake lever.
3. Push the unit a few inches backwards so that the brake lever is pulled up automatically further.
4. Measure the dimension A (Fig. 14). The dimension A should be equal to or lower than 197 mm (7.7 in); if not, the brake mechanism must be readjusted.

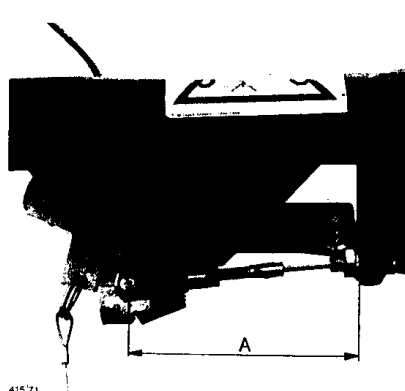


Fig. 14. Detail of brake system

## 5 Problem solving

The chart helps to solve problems.

It is assumed that the engine is in good condition and that there is adequate fuel flow to the filter and injection equipment.

If the engine has stopped through a shut-down switch, only one restarting attempt is permitted while tracing the fault.

An electrical fault must be traced by an electrician. Make sure that the wires are not chafed, damaged or broken and that they are clamped tight to their terminals.

### Alternator precautions

1. Never reverse the polarity of the battery or alternator.
2. Never break any alternator or battery connections while the engine is running.
3. When recharging the battery, disconnect it from the alternator. Before using booster cables to start the engine, make sure of the polarity and connect the batteries correctly.
4. Never operate the engine without the main or voltage-sensing cables connected in the circuit.

### Possible faults and their suggested remedies

Explanation about the table below:

- Conditions of the unit, always preceded by a number, are printed in bold.
- Each possible fault is followed by its related suggested remedy and both are preceded by the same letter.

#### 1. **Lamps (H1) and (H6) do not light up when switching (S1) to "I"**

- a. Defective or discharged battery
- a. Check electrolyte level and charge of battery. If no calls are shorted and battery is discharged, trace cause and correct
- b. Loose battery cable(s) or terminals oxidized
- b. Check and correct as necessary
- c. Loose connection or damaged wiring
- c. Check wiring and connections. Correct as necessary
- d. Switch (S1) defective
- d. With (S1) switched to "I", check voltage between earth and each of the terminals of (S1). If voltage does not register at each of the terminals, replace (S1)

#### 2. **Lamp (H1) does not light up when switching (S1) to "I"; lamp (H6) lights up**

- a. Bulb (H1) blown
- a. Replace bulb
- b. Alternator/regulator defective
- b. Disconnect the wire from alternator terminal D+ and connect it to terminal D-. If (H1) lights up, replace the alternator; if it does not, test (S1); see remedy 1d

#### 3. **Lamp (H6) does not light up when switching (S1) to "I", lamp (H1) lights up**

- a. Bulb (H6) blown
- a. Replace bulb
- b. See fault 1d
- b. See remedy 1d

#### 4. **Hourmeter (P3) starts counting and fuel solenoid (Y1) is energized when switching (S1) to "I"**

- a. Override/start switch (S2) defective
- a. Replace (S2)

#### 5. **Starter motor does not crank engine after switching (S1) to "I" and depressing (S2)**

- a. Low battery output
- a. See remedy 1a
- b. Start switch (S2) defective
- b. With (S1) in "I" and (S2) depressed, check voltage between earth and each of the terminals of (S2). Voltage must register at each of the terminals; if it does not, replace (S2)
- c. Alternator output relay (K6) defective
- c. Replace (K6)
- d. Start solenoid (K0) or starter motor defective
- d. Check start solenoid (K0). Have motor repaired, if necessary

#### 6. **Starter motor cranks engine when depressing (S2), but engine does not fire**

- a. Switch (S2) defective
- a. See remedy 5b
- b. Fuel solenoid (Y1) defective
- b. Check and correct or replace as necessary

#### 7. **Engine fires but lamp (H1) remains alight; unit stops when releasing (S2)**

- a. Alternator drive belt broken or slipping
- a. Check and correct as necessary
- b. Alternator/regulator defective
- b. Have assembly repaired

#### 8. **Lamp (H6) remains alight for over 10 seconds from starting**

- a. Fuel tank contains insufficient fuel
- a. Fill fuel tank
- b. Insufficient engine oil pressure
- b. Stop at once, consult Engine Instruction Manual
- c. Engine oil pressure switch (S5) or compressor temperature switch (S7) defective
- c. Stop at once, test switches, replace as necessary
- d. Fuel level sensor (B6) defective or relay (K8) out of order
- d. Stop at once. Test switch, replace as necessary. If in order, replace relay (K8)

#### 9. **Hourmeter (P3) does not count running time**

- a. Hourmeter defective
- a. Replace

#### 10. **Compressor loaded automatically to full capacity after starting**

- a. Loading valve stuck in loaded position
- a. Remove and dismantle. Correct as necessary
- b. Air intake throttle valve stuck in open position
- b. See 14g
- c. Air leaks in regulating system
- c. See 15b

#### 11. **Engine does not speed up immediately after compressor load button has been pressed and compressor does not deliver air**

- a. Regulating valve out of order
- a. Remove, dismantle and inspect. Correct as necessary
- b. Air intake throttle valve stuck in closed position
- b. See 14g

#### 12. **Excessive compressor oil consumption. Oil mist being discharged from air outlet valves**

- a. Oil level too high
- a. Check air receiver/oil separator for overfilling. Release pressure and drain oil to correct level
- b. Restrictor in scavenging line of oil separator element clogged
- b. Remove hose and clean restrictor



- c. Oil separator element defective
- c. Have element removed and inspected by an Atlas Copco Service representative
- 13. Air consumption varies at pressures above pre-set working pressure, but engine does not accelerate nor decelerate**
  - a. Speed regulator defective
  - a. Remove, dismantle and inspect parts
- 14. Compressor capacity or pressure below normal**
  - a. Air consumption exceeds capacity of compressor
  - a. Check equipment connected
  - b. Choked air filter element
  - b. Remove and inspect element. Clean or replace if necessary
  - c. Regulating valve incorrectly set
  - c. See section 4.1.1
  - d. Engine not up to full speed
  - d. Check speed and adjust length of speed regulator operating rod if necessary.
  - e. Loading valve leakage past O-ring
  - e. Remove and inspect valve. Replace damaged or worn O-rings
  - f. Oil separator element clogged
  - f. Have element removed and inspected by an Atlas Copco Service representative
  - g. Air intake throttle valve remains partially closed
  - g. Disconnect hose between throttle valve housing and loading valve from the latter and connect hose to independent compressed air line. Repeatedly admit air and listen for sound of valve. If sound is not evident, remove unloader valve assembly, dismantle and inspect. Replace parts where necessary
  - h. Safety valve leaking
  - h. Remove and inspect. Replace if not airtight after reinstallation
  - i. Bleed-off valve leaking
  - i. Remove and inspect. Replace, if necessary
  - j. Compressor element out of order
  - j. Consult an Atlas Copco Service representative
- 15. Pressure in receiver rises above maximum and causes safety valve to blow**
  - a. Regulating valve incorrectly set or defective
  - a. Adjust working pressure (see section 4.1.1). Dismantle and inspect parts if valve does not respond
  - b. Air leaks in regulating system
  - b. Check hoses and their fittings. Stop leaks; replace leaking hoses
  - c. Speed regulator malfunctioning
  - c. Remove, dismantle and inspect piston ring and its O-ring. Replace worn or defective parts
  - d. Air intake throttle valve does not close for some reason
  - d. See 14g
  - e. Bleed-off valve malfunctioning
  - e. Remove and inspect valve
- 16. After working for some time, the unit stops through a shut-down switch and alarm lamp (H6) lights up**
  - a. Fuel tank contains insufficient fuel
  - a. Fill fuel tank
  - b. Engine blower belt broken
  - b. Check and replace, if necessary
  - c. Engine oil pressure too low
  - c. See Engine Instruction Manual
  - d. Compressor or engine overheating
  - d. Start unit while observing compressor temperature indicator (Gt). If black pointer rapidly reaches red pointer, compressor overheats (see item 18); if black pointer does not reach red one and unit stops, engine overheats (see Engine Instruction Manual)

**17. Air and oil expelled from air filter after stopping**

- a. If mainly air: check valve defective
  - a. Repair valve and replace air filter element
- b. If mainly oil: oil stop valve defective
  - b. Repair valve and replace air filter element

**18. Compressor overheating**

- a. Insufficient compressor cooling
  - a. Relocate unit, see section 2.1
- b. Oil cooler clogged externally
  - b. Clean cooler
- c. Oil cooler clogged internally
  - c. Consult Atlas Copco
- d. Oil level too low
  - d. See section 3.3
- e. Fan blade(s) broken
  - e. Check and correct as necessary
- f. Oil stop valve stuck in closed position
  - f. Remove and inspect valve
- g. Oil separator element clogged
  - g. See 14f

**19. Air and oil leak on blow-down valve during operation**

- a. Membrane of blow-down valve cracked
  - a. Replace membrane

## 6 Principal data

### 6.1 Reading on gauge

**Marking:** DELIVERY PRESSURE**Reading:** Depends on setting of regulating valve. **Before compression starting (no load)** .. approx. 2.1 bar(e)  
approx. 31 psig**Remarks:** Modulates, depending on air consumption, between unloading pressure and working pressure**Ref.:** Gpw

### 6.2 Torque values

| Assemblies                    | Unit         | Torque values      |
|-------------------------------|--------------|--------------------|
| Wheel nuts 1) .....           | Nm<br>lbf ft | 80-90<br>59-66     |
| Screws (M16), axle/frame..... | Nm<br>lbf ft | 190-220<br>139-162 |
| Screws (M12), axle/frame..... | Nm<br>lbf ft | 75-85<br>55-62     |
| Bolts, drawbar/axle.....      | Nm<br>lbf ft | 75-85<br>55-62     |
| Screws, drawbar/frame.....    | Nm<br>lbf ft | 75-85<br>55-62     |

|                                            |              |                   |
|--------------------------------------------|--------------|-------------------|
| Screws, lifting eye/coupling housing ..... | Nm<br>lbf ft | 110-140<br>81-103 |
| Screws, coupling half/coupling .....       | Nm<br>lbf ft | 80-90<br>59-66    |
| Bolts, coupling housing/engine .....       | Nm<br>lbf ft | 70-85<br>52-63    |
| Fuel tubes and drain cock of fuel tank ... | Nm<br>lbf ft | 13-17<br>9-12     |
| Nuts, brake cable/wheel plate .....        | Nm<br>lbf ft | 15-25<br>11-18    |

- 1) Check and retighten the wheel nuts to the specified torque after the first 50 km (30 miles) travel.

### 6.3 Settings of shut-down switches and safety valve

| Shut-down switches                                | Makes at            | Breaks at        | Unit       | Ref. |
|---------------------------------------------------|---------------------|------------------|------------|------|
| Engine oil pressure(e) .....                      | 1.8-2.3<br>26-33    | 2.3-1.8<br>33-26 | bar<br>psi | S5   |
| Compressor temperature,<br>adjustable up to ..... | --                  | 120<br>248       | °C<br>°F   | S7   |
| Safety valve                                      | Opening pressure(e) |                  | Unit       | Ref. |
|                                                   | 9.3<br>135          |                  | bar<br>psi | SV   |

### 6.4 Outlet valve specifications

Number .....4  
Diameter.....3/4"

### 6.5 Compressor/engine specifications

#### 1. Compressor/engine

|                                                                              |                   |
|------------------------------------------------------------------------------|-------------------|
| Number of compression stages .....                                           | 1                 |
| Maximum (unloading) pressure(e) .....                                        | 8.5<br>bar<br>psi |
| Normal working pressure(e) .....                                             | 7<br>bar<br>psi   |
| Up to altitude of 1) .....                                                   | 1000<br>m<br>ft   |
| Minimum working pressure(e) .....                                            | 4<br>bar<br>psi   |
| Free air delivery at normal working pressure<br>and max. load speed 2) ..... | 75<br>l/s<br>cfm  |
| Compressor cooling system .....                                              | oil/air           |
| Deutz diesel engine, air-cooled .....                                        | F4L1011           |

|                                                        |             |
|--------------------------------------------------------|-------------|
| Engine speeds:                                         |             |
| - Maximum load speed .....                             | r/min 2300  |
| - Unloading speed .....                                | r/min 1400  |
| - No-load speed (loading valve not<br>depressed) ..... | r/min 1430  |
| Electrical system, negative earthed .....              | V 12        |
| Batteries:                                             |             |
| - Number .....                                         | 1           |
| - Voltage/capacity .....                               | V/Ah 12/100 |
| - Cold cranking current<br>(DIN 72311) .....           | A 360       |

#### 2. Filling capacities

|                             |                      |
|-----------------------------|----------------------|
| Compressor oil system ..... | l 17.5<br>US gal 4.6 |
| Engine oil system, approx.: |                      |
| - Initial fill .....        | l 13<br>US gal 3.4   |
| - Refill .....              | l 10.5<br>US gal 2.8 |
| Fuel tank .....             | l 85<br>US gal 22.5  |

#### 3. Unit

|                                                                                                                                                         |                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Air receiver capacity .....                                                                                                                             | l 22<br>cu.ft 0.77 |
| Temperature above ambient of air leaving outlet<br>valves, approx. ....                                                                                 | °C 55<br>°F 99     |
| Max. ambient temperature at sea-level, normal<br>working pressure and max. load speed .....                                                             | °C 50<br>°F 122    |
| Sound pressure level (for XAS) at normal working<br>pressure and max. load speed, at a distance of<br>7 m (23 ft), according to ISO 2151 ±3 dB(A) ..... | dB(A) 73           |
| Overall length, incl. drawbar, approx. ....                                                                                                             | mm 3170<br>in 125  |
| Overall width, approx. ....                                                                                                                             | mm 1520<br>in 60   |
| Overall height, approx. ....                                                                                                                            | mm 1375<br>in 54   |
| Net mass, dry                                                                                                                                           | XA .....           |
|                                                                                                                                                         | kg 1020<br>lb 2245 |
|                                                                                                                                                         | XAS .....          |
|                                                                                                                                                         | kg 1065<br>lb 2345 |

#### 4. Towing

|                         |                         |
|-------------------------|-------------------------|
| Max. towing speed ..... | km/h 80<br>mile/h 50    |
| Tyres:                  |                         |
| - Type                  | - XA .....              |
|                         | Michelin 6"-16"<br>8ply |
|                         | - XAS .....             |
|                         | 165R14<br>XCPR6         |
| - Pressure(e) .....     | bar 3.75<br>psi 54      |

- 1) For operation at higher altitudes and in extreme ambient conditions, consult Atlas Copco  
2) At following conditions:  
- Air intake pressure (absolute) ..... 1 bar (14.5 psi)  
- Air intake temperature ..... 20°C (68°F)  
- Relative air humidity ..... 0 %

**Atlas Copco**

Reg. code  
ASL XA Dd-31  
1989-09

To be filed in the ASL collection -- binder 23 -- under tab 69.

Parts list for  
**Portable compressors**

Teilliste für  
**Fahrbare Kompressoren**

Onderdelenlijst voor  
**Transportabele kompressoren**

Liste de pièces pour  
**Compresseurs mobiles**

Reservdelsförteckning för  
**Transportabla kompressorer**

Lista de las partes para  
**Compresores transportables**

**XA(S)75 Dd**

From serial number ARP-975 065 onwards

Page    Contents  
Blz.    Inhoud  
Sida    Innehåll

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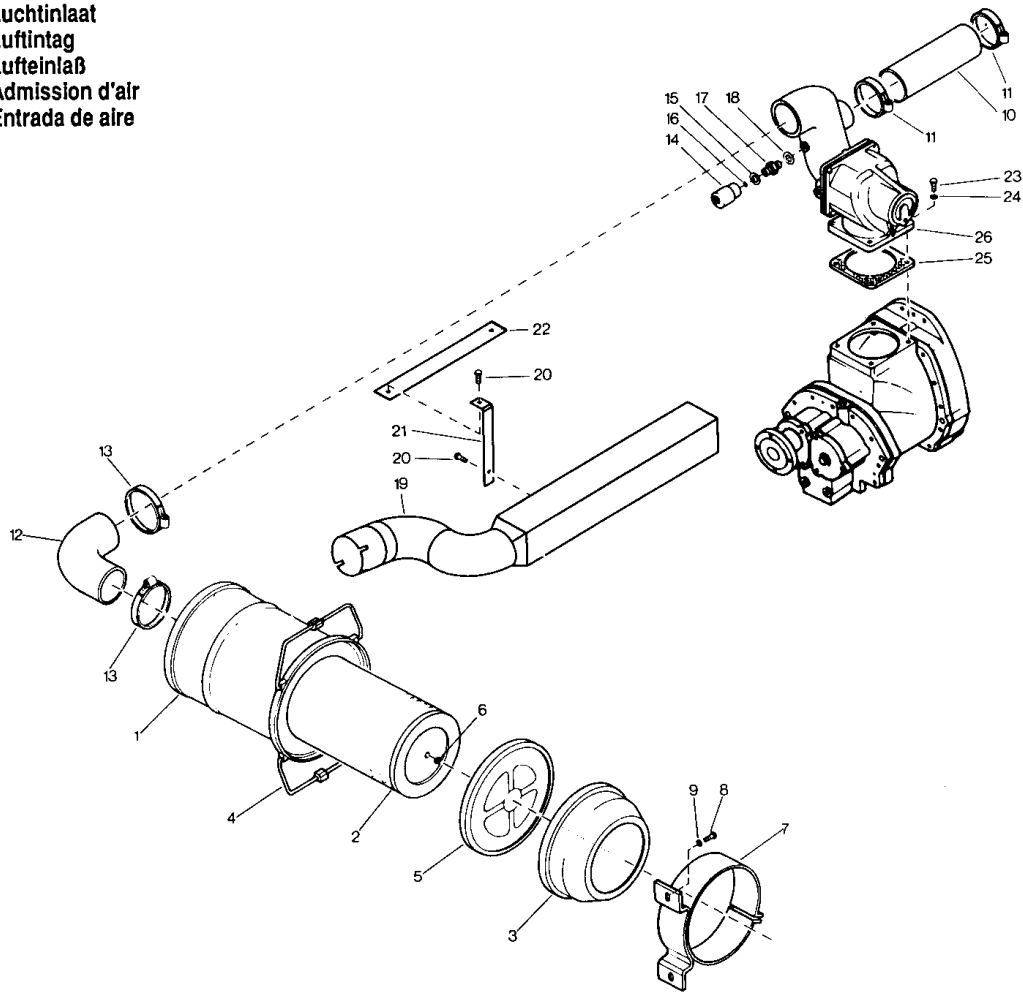
|    |                                                                                                                                                                      |    |                                                                                                          |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----------------------------------------------------------------------------------------------------------|
| 4  | Air inlet<br>Luchtinlaat<br>Luftintag                                                                                                                                | 25 | Frame<br>Frame<br>Ram                                                                                    |
| 5  | Coupling<br>Koppeling<br>Koppling                                                                                                                                    | 26 | Speed regulator<br>Snelheidsregelaar<br>Varvtalsregulator                                                |
| 7  | Cooler and fan<br>Koeler en ventilator<br>Kylare och fläkt                                                                                                           | 27 | Engine, accessories and exhaust<br>Motor, toebehoren en uitlaat<br>Motor, tillbehör och avgasljuddämpare |
| 8  | Control panel<br>Bedieningsbord<br>Manöverpanel                                                                                                                      | 28 | Contents "Service kits"<br>Inhoud "Service kits"<br>Innehåll "Service kits"                              |
| 9  | Oil stop valve<br>Olieafsluitklep<br>Avstängningsventil, olja                                                                                                        | 28 | "SERVICE PAK" Maintenance kits<br>"SERVICE PAK" Onderhoudskits<br>"SERVICE PAK" Underhållsutrustning     |
| 11 | Fuel system<br>Brandstofsysteem<br>Bränslesystem                                                                                                                     |    |                                                                                                          |
| 13 | Connections for speed regulation and unloading<br>Aansluitingen voor snelheidsregeling en ontlastsysteem<br>Anslutningar för varvtalsreglering och avlastningssystem |    |                                                                                                          |
| 14 | Unloading valve<br>Ontlastventiel<br>Avlastningsventil                                                                                                               |    |                                                                                                          |
| 15 | Loading valve<br>Belastklep<br>Pålastningsventil                                                                                                                     |    |                                                                                                          |
| 16 | Regulating valve<br>Regelventiel<br>Regleringsventil                                                                                                                 |    |                                                                                                          |
| 17 | Minimum pressure valve<br>Minimumdrukklep<br>Minimitryckventil                                                                                                       |    |                                                                                                          |
| 18 | Electrical equipment<br>Elektrische apparatuur<br>Elutrustning                                                                                                       |    |                                                                                                          |
| 19 | Axle<br>As<br>Axel                                                                                                                                                   |    |                                                                                                          |
| 21 | Air receiver and air outlet<br>Luchtetel en luchtuitlaat<br>Luftbehållare och luftutlopp                                                                             |    |                                                                                                          |
| 23 | Bodywork<br>Karrosserie<br>Karossen                                                                                                                                  |    |                                                                                                          |
| 2  |                                                                                                                                                                      |    |                                                                                                          |

"Service kits" reference to pages  
"Service kits" verwijzing naar bladzijden  
"Service kits" refererar till sidor

|          |                                                                                                                                                                 |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5        | Seal kit (Kit 2910 0155 20)<br>Aldichiset (Kit 2910 0155 20)<br>Tätningssats (Kit 2910 0155 20)                                                                 |
| 13,26    | Speed regulator (Kit 2910 3006 00)<br>Snelheidsregelaar (Kit 2910 3006 00)<br>Varvtalsregulator (Kit 2910 3006 00)                                              |
| 8,13,15  | Loading valve (Kit 2910 3007 00)<br>Belastklep (Kit 2910 3007 00)<br>Pålastningsventil (Kit 2910 3007 00)                                                       |
| 7,9      | Oil stop valve (Kit 2910 3009 00)<br>Olieafsluitklep (Kit 2910 3009 00)<br>Avstängningsventil, olja (Kit 2910 3009 00)                                          |
| 13,16    | Regulating valve (Kit 2910 3012 00)<br>Regelventiel (Kit 2910 3012 00)<br>Regleringsventil (Kit 2910 3012 00)                                                   |
| 13,17,21 | Minimum pressure valve (Kit 2910 3029 00)<br>Minimumdrukklep (Kit 2910 3029 00)<br>Minimitryckventil (Kit 2910 3029 00)                                         |
| 4,13,14  | Unloading valve (Kit 2910 3035 00)<br>Ontlastventiel (Kit 2910 3035 00)<br>Avlastningsventil (Kit 2910 3035 00)                                                 |
| 4,5,7,21 | Mounting kit, compressor element (Kit 2910 4046 00)<br>Montagekit, kompressorelement (Kit 2910 4046 00)<br>Monteringssats, kompressorelement (Kit 2910 4046 00) |
| 7,21     | Air receiver (Kit 2910 6005 00)<br>Luchtetel (Kit 2910 6005 00)<br>Luftbehållare (Kit 2910 6005 00)                                                             |

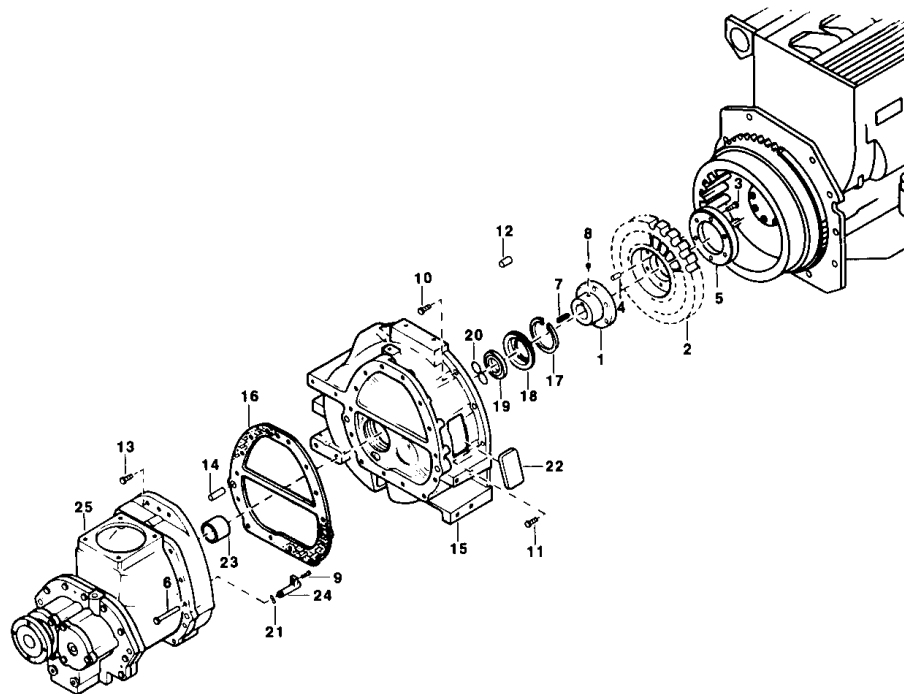
"Service kits" mit Verwels zu den Seiten  
 "Service kits" avec pages de référence  
 "Service kits" con referencia a página

Air inlet  
Luchtinlaat  
Luftintag  
Lufteinlaß  
Admission d'air  
Entrada de aire



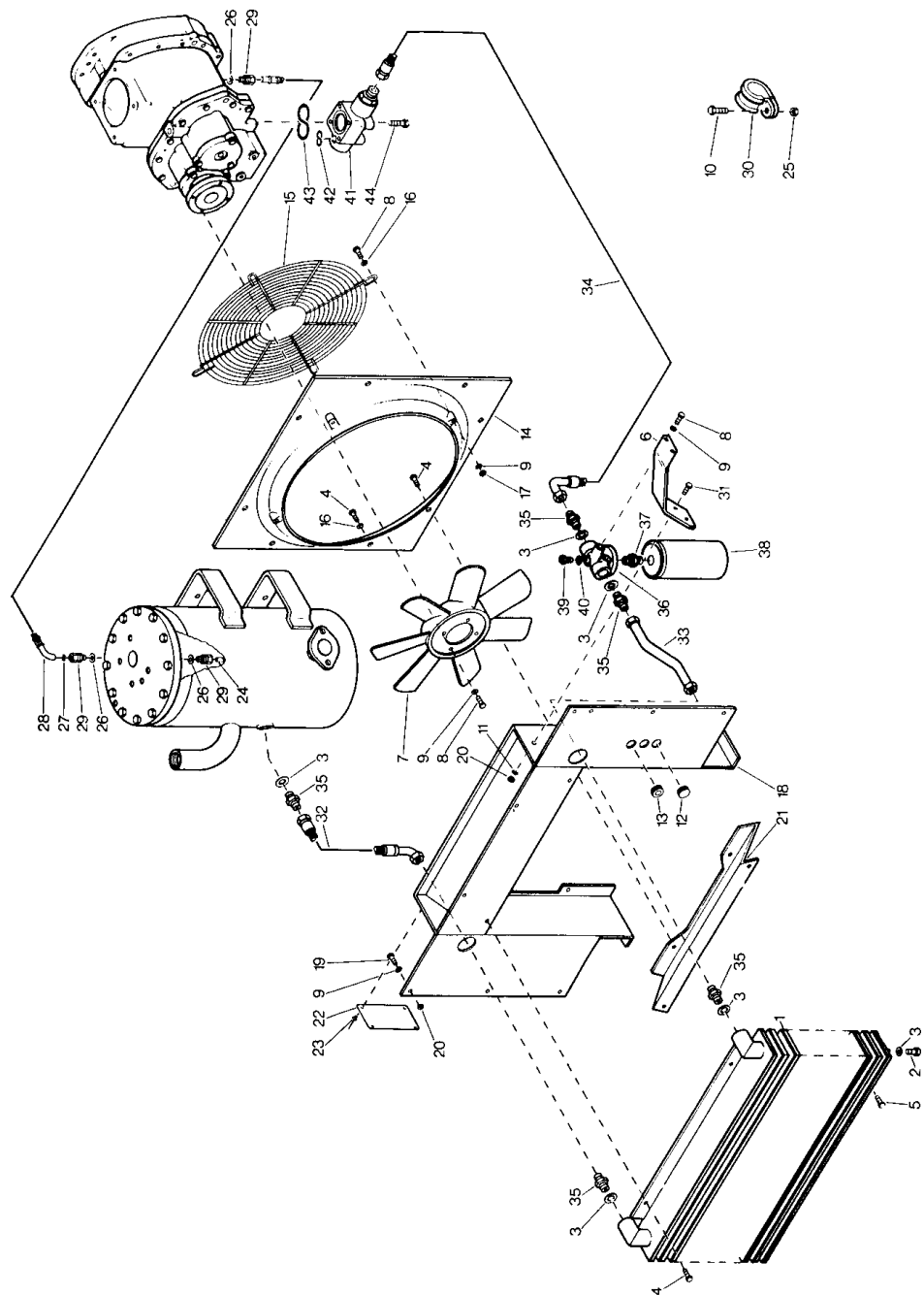
| Ref. | A            | B | C | D | Designation    | Ref. | A                | B | C   | D | Designation |                 |
|------|--------------|---|---|---|----------------|------|------------------|---|-----|---|-------------|-----------------|
| -    | 1619 5041 00 |   |   | 1 | Air filter     | 16   | 1619 3794 00     |   |     | 1 | Felt disc   |                 |
| 1    | ••••         | • |   | 1 | Housing        | 17   | 1612 2152 00     |   |     | 1 | Nipple      |                 |
| -    | 2900 0217 00 | • |   | 1 | Cyclone        | 18   | 0653 1046 00     |   | 1   |   | 1           | Gasket          |
| 2    | 1619 2847 00 | • |   | 1 | Element        | 19   | 1202 9053 00     |   |     | 1 | Air duct    |                 |
| 3    | 1619 3733 00 | • |   | 1 | Cover          | 20   | 1619 2766 00     |   |     | 4 | Bolt        |                 |
| 4    | 1619 3730 00 | • |   | 2 | Clamp          | 21   | 1202 9054 00     |   |     | 2 | Bracket     |                 |
| 5    | 1619 3732 00 | • |   | 1 | Cover          | 22   | 1202 9021 00     |   |     | 1 | Plate       |                 |
| 6    | 1619 3731 00 | • |   | 1 | Nut            | 23   | 0147 1363 03     |   |     | 4 | Bolt        |                 |
| 7    | 1619 2705 00 |   |   | 1 | Support        | 24   | 0301 2344 00     |   |     | 4 | Washer      |                 |
| 8    | 0147 1360 03 |   |   | 2 | Bolt           | 25   | 1202 7024 00     |   | 1,2 |   | 1           | Gasket          |
| 9    | 0301 2344 00 |   |   | 2 | Washer         | 26   | ---              |   |     |   | 1           | Unloading valve |
| 10   | 1202 9079 00 |   |   | 1 | Hose           |      |                  |   |     |   |             |                 |
| 11   | 0347 4377 00 |   |   | 2 | Clamp ring     | 1    | Kit 2910 3035 00 |   |     |   |             |                 |
| 12   | 1614 4346 00 |   |   | 1 | Elbow          | 2    | Kit 2910 4046 00 |   |     |   |             |                 |
| 13   | 0347 6115 00 |   |   | 2 | Clamp ring     |      |                  |   |     |   |             |                 |
| 14   | 1619 3790 01 |   |   | 1 | Warning device |      |                  |   |     |   |             |                 |
| 15   | 0657 5742 00 |   |   | 1 | Gasket         |      | 6_057_0_0_0      |   |     |   |             |                 |

Coupling  
Koppeling  
Koppling  
Kupplung  
Accouplement  
Acoplamiento



| Ref. | A            | B | C     | D  | Designation      |
|------|--------------|---|-------|----|------------------|
| -    | 1614 4393 80 |   | ..... | 1  | Coupling         |
| 1    | 1614 4393 00 | • | ..... | 1  | Coupling hub     |
| 2    | 1619 3804 00 | • | ..... | 1  | Coupling element |
| 3    | 0147 1406 03 | • | ..... | 6  | Bolt             |
| 4    | 1619 5050 00 | • | ..... | 6  | Spacer           |
| 5    | 1613 2583 00 | • | ..... | 1  | Clamp ring       |
| 6    | 0147 1377 03 |   | ..... | 12 | Bolt             |
| 7    | 0337 5198 00 |   | ..... | 1  | Key              |
| 8    | 0196 1356 00 |   | ..... | 1  | Set screw        |
| 9    | 0147 1244 03 |   | ..... | 1  | Bolt             |
| 10   | 0211 1363 00 |   | ..... | 8  | Cap screw        |
| 11   | 0211 1438 00 |   | ..... | 1  | Cap screw        |
| 12   | 0102 0460 00 |   | ..... | 3  | Pin              |
| 13   | 0147 1365 03 |   | ..... | 2  | Bolt             |
| 14   | 0101 1626 00 |   | ..... | 2  | Pin              |
| 15   | 1202 9003 00 |   | ..... | 1  | Coupling housing |

| Ref.         | A                | B | C      | D | Designation   |
|--------------|------------------|---|--------|---|---------------|
| 16           | 1202 7016 00     |   | 2..... | 1 | Gasket        |
| 17           | 0335 2169 00     |   | .....  | 1 | Circlip       |
| 18           | 1613 2201 00     |   | .....  | 1 | Retainer      |
| 19           | 1619 3857 00     |   | 1..... | 1 | Seal ring     |
| 20           | 0663 7141 00     |   | 1..... | 1 | O-ring        |
| 21           | 0663 3117 00     |   | .....  | 1 | O-ring        |
| 22           | 2253 4187 00     |   | .....  | 1 | Cover         |
| 23           | 1613 2200 00     |   | 1..... | 1 | Bush          |
| 24           | 1613 2203 00     |   | .....  | 1 | Oil nozzle    |
| 25           | 2989 0091 00     |   | .....  | 1 | Service stage |
| 1            | Kit 2910 0155 20 |   |        |   |               |
| 2            | Kit 2910 4046 00 |   |        |   |               |
| 16_091_5_0_0 |                  |   |        |   |               |



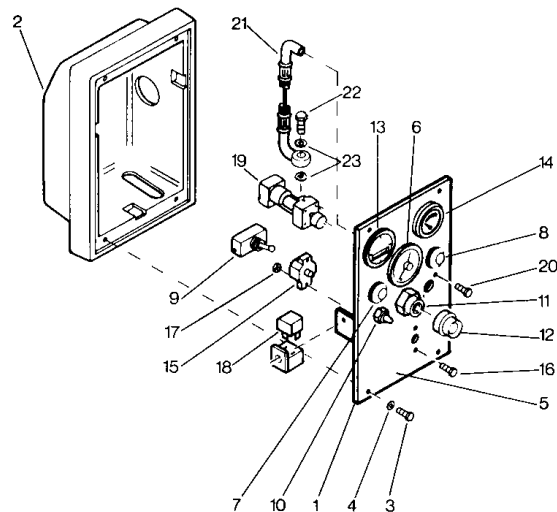


Cooler and fan  
 Koeler en ventilator  
 Kylare och fläkt  
 Kühler und Lüfter  
 Refroidisseur et ventilateur  
 Refrigerador y ventilador

| Ref. | A            | B | C   | D  | Designation  | Ref. | A                | B | C   | D | Designation    |
|------|--------------|---|-----|----|--------------|------|------------------|---|-----|---|----------------|
| 1    | 1202 9049 00 |   |     | 1  | Oil cooler   | 28   | 0574 8101 33     |   |     | 1 | Flexible       |
| 2    | 0686 4206 00 |   |     | 2  | Plug         | 29   | 0581 0000 52     |   |     | 3 | Coupling       |
| 3    | 0661 1038 00 |   | 2   | 7  | Gasket       | -    | 0584 2310 00     | • |     | 1 | Nut            |
| 4    | 1619 2766 00 |   |     | AR | Bolt         | -    | 0584 0080 08     | • |     | 1 | Clamp ring     |
| 5    | 1619 5337 01 |   |     | 2  | Bolt         | 30   | 1613 0803 02     |   |     | 1 | Clamp          |
| 6    | 1614 6084 00 |   |     | 1  | Bracket      | 31   | 0147 1320 03     |   |     | 2 | Bolt           |
| 7    | 1619 6876 00 |   |     | 1  | Fan          | 32   | 0574 8235 14     |   |     | 1 | Flexible       |
| 8    | 0147 1323 03 |   |     | 10 | Bolt         | 33   | 1614 6083 00     |   |     | 1 | Pipe           |
| 9    | 0301 2335 00 |   |     | 16 | Washer       | 34   | 0574 8235 11     |   |     | 1 | Flexible       |
| 10   | 0147 1246 03 |   |     | 1  | Bolt         | 35   | 1619 5509 00     |   |     | 5 | Nipple         |
| 11   | 0333 3227 00 |   |     | 2  | Lock washer  | 36   | 1612 2668 00     |   |     | 1 | Housing        |
| 12   | 1619 5225 00 |   |     | 1  | Plug         | 37   | 1619 3770 00     |   |     | 1 | Nipple         |
| 13   | 0698 0156 00 |   |     | 2  | Bushing      | 38   | 1612 3980 00     |   |     | 1 | Oil filter     |
| 14   | 1614 4383 00 |   |     | 1  | Fan guide    | 39   | 0686 4201 00     |   |     | 1 | Plug           |
| 15   | 1614 4374 00 |   |     | 1  | Fan guard    | 40   | 0653 1046 00     |   |     | 1 | Gasket         |
| 16   | 1616 3286 00 |   |     | 8  | Washer       | 41   | - - -            |   |     | 1 | Oil stop valve |
| 17   | 0291 1110 00 |   |     | 4  | Lock nut     | 42   | 0663 3120 00     |   | 1,3 | 1 | O-ring         |
| 18   | 1614 4380 00 |   |     | 1  | Fan cowl     | 43   | 0663 7135 00     |   | 1,3 | 1 | O-ring         |
| 19   | 0147 1322 03 |   |     | 2  | Bolt         | 44   | 0147 1336 03     |   |     | 4 | Bolt           |
| 20   | 0266 2110 00 |   |     | 4  | Nut          |      |                  |   |     |   |                |
| 21   | 1614 4298 00 |   |     | 1  | Plate        | 1    | Kit 2910 3009 00 |   |     |   |                |
| 22   | 1091 1204 00 |   |     | 1  | Patent plate | 2    | Kit 2910 6005 00 |   |     |   |                |
| 23   | 0129 3103 00 |   |     | 4  | Pop rivet    | 3    | Kit 2910 4046 00 |   |     |   |                |
| 24   | 1614 4490 01 |   |     | 1  | Pipe         |      |                  |   |     |   |                |
| 25   | 0266 2108 00 |   |     | 1  | Nut          |      |                  |   |     |   |                |
| 26   | 0653 1062 00 |   | 2,3 | 3  | Gasket       |      |                  |   |     |   |                |
| 27   | 1613 2609 07 |   |     | 1  | Restrictor   |      |                  |   |     |   |                |

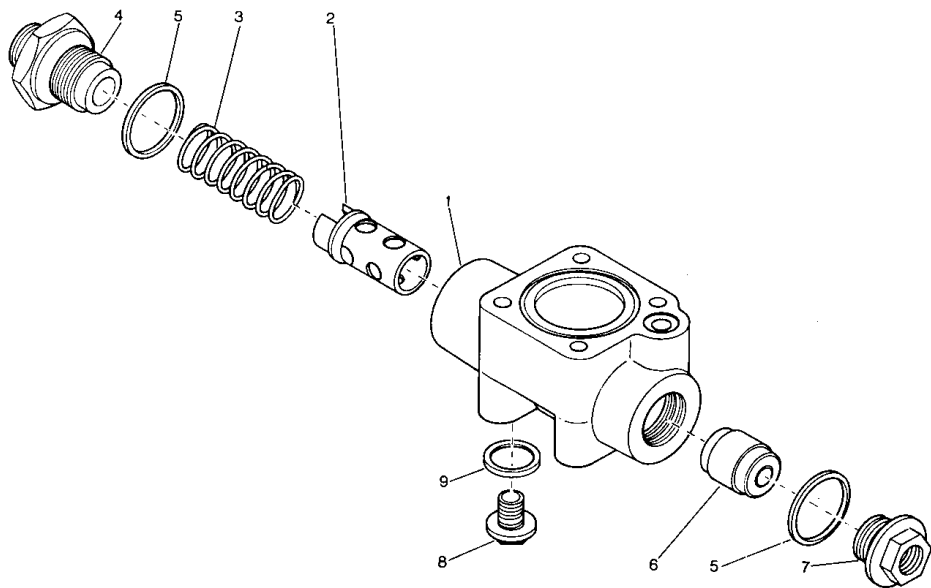
13\_040\_4\_0\_1

Control panel  
 Bedieningsbord  
 Manöverpanel  
 Steuertafel  
 Panneau de commande  
 Panel de control



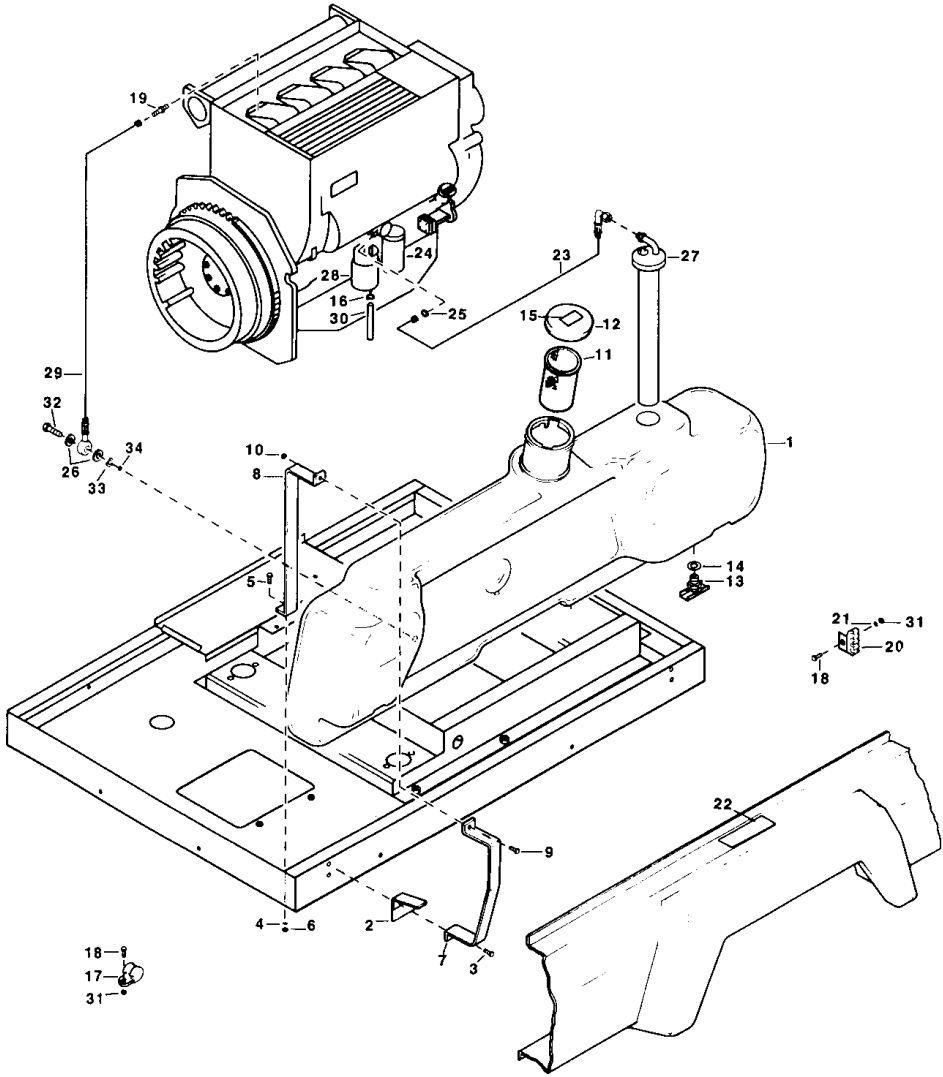
| Ref. | A            | B  | C | D | Designation      | Ref. | A                | B | C | D | Designation   |
|------|--------------|----|---|---|------------------|------|------------------|---|---|---|---------------|
| 1    | 1616 5071 00 |    |   | 1 | Instrument panel | 10   | 1619 2371 00     |   |   | 1 | Shroud        |
| 2    | 1614 4363 00 |    |   | 1 | Cover            | 11   | 1089 0356 02     |   |   | 1 | Push button   |
| 3    | 0147 1252 03 |    |   | 4 | Bolt             | 12   | 1612 2386 00     |   |   | 1 | Cap           |
| 4    | 0301 2321 00 |    |   | 4 | Washer           | 13   | 1089 0352 01     |   |   | 1 | Hourmeter     |
| 5    |              |    |   | 1 | Decal            | 14   | 1619 7737 00     |   |   | 1 | Fuel gauge    |
|      | 1079 9916 21 |    |   |   | English          | 15   | 1089 0322 07     |   |   | 1 | Fuse          |
|      | 1079 9916 22 |    |   |   | Dutch            | 16   | 0160 6063 00     |   |   | 2 | Screw         |
|      | 1079 9916 23 |    |   |   | Swedish          | 17   | 0266 2107 00     |   |   | 2 | Nut           |
|      | 1079 9916 24 |    |   |   | German           | 18   | 1089 0341 01     |   |   | 3 | Relay         |
|      | 1079 9916 25 |    |   |   | French           | 19   | -- --            |   |   | 1 | Loading valve |
|      | 1079 9916 26 |    |   |   | Spanish          | 20   | 0160 6062 00     |   |   | 2 | Screw         |
|      | 1079 9916 27 |    |   |   | Italian          | 21   | 1202 5374 00     |   |   | 1 | Hose assembly |
| 6    | 1619 5268 00 |    |   | 1 | Press. gauge     | 22   | 0627 5110 00     |   |   | 1 | Press. screw  |
|      | 1619 5086 00 | An |   | 1 | Press. gauge     | 23   | 0653 1046 00     | 1 |   | 2 | Gasket        |
|      | 1310 0154 00 | As |   | 1 | Press. gauge     |      |                  |   |   |   |               |
| 7    | 1089 0312 01 |    |   | 1 | Lampholder       |      |                  |   |   |   |               |
| 8    | 1089 0312 02 |    |   | 1 | Lampholder       |      |                  |   |   |   |               |
| -    | 1091 0168 00 |    |   | 2 | Lamp             |      |                  |   |   |   |               |
| 9    | 1089 0262 02 |    |   | 1 | Toggle switch    |      |                  |   |   |   |               |
|      |              |    |   |   |                  | 1    | Kit 2910 3007 00 |   |   |   |               |
|      |              |    |   |   |                  |      | 28_075_2_2_2     |   |   |   |               |

Oil stop valve  
Oliefsluitklep  
Avstängningsventil, olja  
Ölabsperrventil  
Soupape d'arrêt d'huile  
Válvula de cierre de aceite



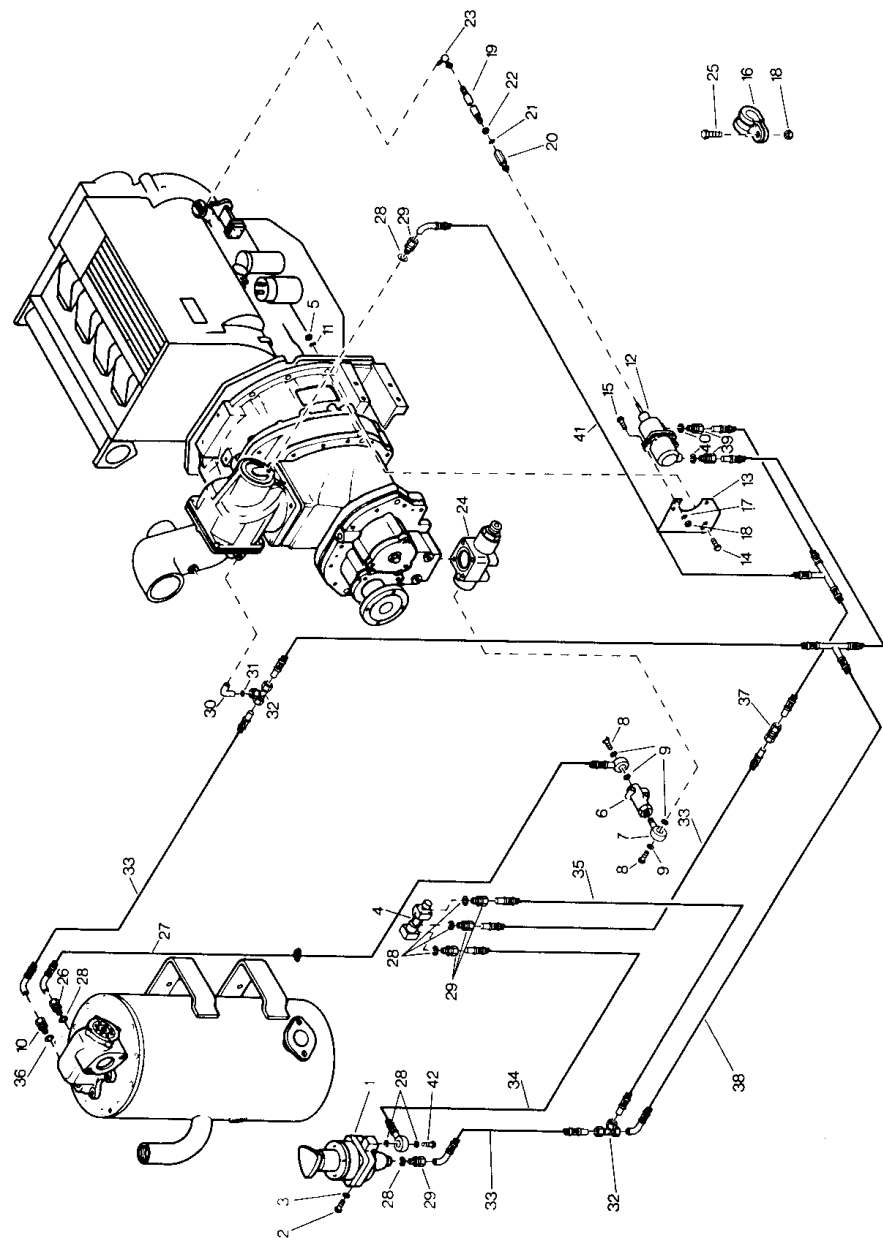
| Ref. | A            | B | C | D | Designation    |
|------|--------------|---|---|---|----------------|
| -    | 1613 2355 82 |   |   | 1 | Oil stop valve |
| 1    | •            | • |   | 1 | Housing        |
| 2    | 1613 2356 00 | • |   | 1 | Valve          |
| 3    | 1613 2357 00 | • |   | 1 | Spring         |
| 4    | 1612 2624 00 | • |   | 1 | Nipple         |
| 5    | 0661 1049 00 | • | 1 | 2 | Gasket         |
| 6    | 1613 2359 00 | • |   | 1 | Piston         |
| 7    | 1614 3301 00 | • |   | 1 | Plug           |

| Ref.         | A                | B | C      | D | Designation |
|--------------|------------------|---|--------|---|-------------|
| 8            | 0686 4204 00     | • | .....  | 1 | Plug        |
| 9            | 0661 1033 00     | • | 1..... | 1 | Gasket      |
| 1            | Kit 2910 3009 00 |   |        |   |             |
| 22_044_1_1_0 |                  |   |        |   |             |



Fuel system  
 Brandstofsysteem  
 Bränslesystem  
 Kraftstoffsystem  
 Système de combustible  
 Sistema de combustible

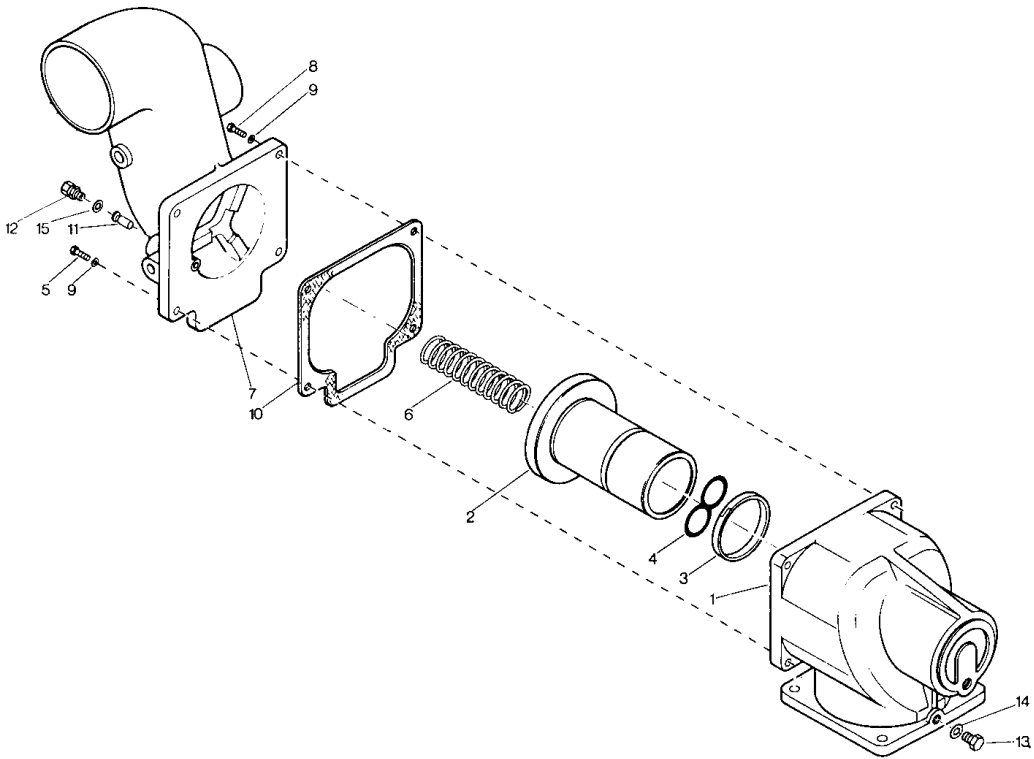
| Ref. | A            | B | C     | D | Designation | Ref. | A            | B | C     | D  | Designation  |
|------|--------------|---|-------|---|-------------|------|--------------|---|-------|----|--------------|
| 1    | 1614 6110 00 |   | ..... | 1 | Fuel tank   | 18   | 0147 1246 03 |   | ..... | 3  | Bolt         |
| 2    | 1614 4308 00 |   | ..... | 2 | Bracket     | 19   | 1202 9078 00 |   | ..... | 1  | Hose nipple  |
| 3    | 1619 5337 01 |   | ..... | 4 | Bolt        | 20   | 1202 9075 80 |   | ..... | 1  | Bracket      |
| 4    | 0333 3227 00 |   | ..... | 2 | Lock washer | 21   | 0333 3220 00 |   | ..... | 2  | Lockwasher   |
| 5    | 0147 1323 03 |   | ..... | 2 | Bolt        | 22   |              |   | ..... | 1  | Decal        |
| 6    | 0266 2110 00 |   | ..... | 2 | Nut         |      | 1614 4956 00 |   | ..... |    | English      |
| 7    | 1614 4296 01 |   | ..... | 1 | Strap       |      | 1079 9902 32 |   | ..... |    | Dutch        |
| 8    | 1614 4296 02 |   | ..... | 3 | Strap       |      | 1079 9902 33 |   | ..... |    | Swedish      |
| 9    | 0147 1329 03 |   | ..... | 2 | Bolt        |      | 1079 9902 34 |   | ..... |    | German       |
| 10   | 0291 1110 00 |   | ..... | 2 | Lock nut    |      | 1079 9902 35 |   | ..... |    | French       |
| 11   | 1619 6590 00 |   | ..... | 1 | Strainer    |      | 1079 9902 37 |   | ..... |    | Italian      |
| 12   | 1619 6591 00 |   | ..... | 1 | Cover       | 23   | 1202 9080 00 |   | ..... | 1  | Flexible     |
| 13   | 0858 1101 02 |   | ..... | 1 | Drain cock  | 24   | ---          |   | ..... | 1  | Oil filter   |
| 14   | 0661 1025 00 |   | ..... | 1 | Gasket      | 25   | 0347 6103 00 |   | ..... | 1  | Hose clip    |
| 15   |              |   | ..... | 1 | Decal       | 26   | 0661 1023 00 |   | ..... | 2  | Gasket       |
|      | 1612 4264 00 |   | ..... |   | English     | 27   | 1619 7738 02 |   | ..... | 1  | Fuel gauge   |
|      | 1079 9912 92 |   | ..... |   | Dutch       | 28   | ---          |   | ..... | 1  | Fuel filter  |
|      | 1079 9912 93 |   | ..... |   | Swedish     | 29   | 0574 9191 36 |   | ..... | 1  | Flexible     |
|      | 1079 9912 94 |   | ..... |   | German      | 30   | 0099 9910 34 |   | ..... | AR | Hose         |
|      | 1079 9912 95 |   | ..... |   | French      | 31   | 0266 2108 00 |   | ..... | 3  | Nut          |
|      | 1079 9912 96 |   | ..... |   | Spanish     | 32   | 0627 4200 05 |   | ..... | 1  | Press. screw |
|      | 1079 9912 97 |   | ..... |   | Italian     | 33   | 1614 4982 00 |   | ..... | 1  | Washer       |
| 16   | 0347 6102 00 |   | ..... | 1 | Clamp ring  | 34   | 1614 4981 00 |   | ..... | 1  | Washer       |
| 17   |              |   | ..... | 1 | Clamp       |      |              |   |       |    |              |
|      | 1613 0801 05 |   | ..... |   | 1x8         |      |              |   |       |    |              |
|      | 1613 0804 02 |   | ..... |   | 4x13        |      |              |   |       |    |              |
|      |              |   |       |   |             |      | 32_088_0_0_1 |   |       |    |              |



Connections for speed regulation and unloading  
 Aansluitingen voor snelheidsregeling en ontlastsysteem  
 Anslutningar för varvtalsreglering och avlastningssystem  
 Anschlüsse für Drehzahlregelung und Entlastung  
 Connexions du système de régulation de vitesse et de décharge  
 Conexiones entre regulación de velocidad y sistema de descarga

| Ref. | A            | B | C | D | Designation     | Ref. | A                | B | C       | D | Designation  |
|------|--------------|---|---|---|-----------------|------|------------------|---|---------|---|--------------|
| 1    | ----         |   |   | 1 | Regul. valve    | 28   | 0653 1062 00     |   | 2,3,4,5 | 8 | Gasket       |
| 2    | 0147 1359 03 |   |   | 2 | Bolt            | 29   | 0581 0028 00     |   |         | 5 | Coupling     |
| 3    | 0301 2344 00 |   |   | 2 | Washer          | -    | 0584 2314 00     | • |         | 1 | Nut          |
| 4    | ----         |   |   | 1 | Loading valve   | -    | 0584 0314 00     | • |         | 1 | Clamp ring   |
| 5    | 0266 2111 00 |   |   | 1 | Nut             | 30   | 1614 4815 00     |   |         | 1 | Elbow        |
| 6    | 9128 1308 01 |   |   | 1 | Blow-down valve | 31   | 1613 2609 05     |   |         | 1 | Restrictor   |
| 7    | 1202 5262 00 |   |   | 1 | Coupling        | 32   | 0581 2210 00     |   |         | 2 | Tee          |
| 8    | 0627 5113 03 |   |   | 2 | Press. screw    | -    | 0584 2314 00     | • |         | 3 | Nut          |
| 9    | 0653 1062 00 |   |   | 4 | Gasket          | -    | 0584 0314 00     | • |         | 3 | Clamp ring   |
| 10   | 0581 0031 00 |   |   | 1 | Coupling        | 33   | 1613 0886 00     |   |         | 3 | Flexible     |
| -    | 0584 0314 00 | • |   | 1 | Clamp ring      | 34   | 0574 9012 26     |   |         | 1 | Flexible     |
| -    | 0584 2314 00 | • |   | 1 | Nut             | 35   | 0574 8012 07     |   |         | 1 | Flexible     |
| 11   | 0333 3232 00 |   |   | 1 | Lock washer     | 36   | 0653 1100 00     |   | 4       | 1 | Gasket       |
| 12   | ----         |   |   | 1 | Speed regulator | 37   | 0580 1404 00     |   |         | 1 | Coupling     |
| 13   | 1202 9061 00 |   |   | 1 | Bracket         | -    | 0584 2024 00     | • |         | 2 | Nut          |
| 14   | 0147 1364 03 |   |   | 1 | Bolt            | -    | 0584 0023 00     | • |         | 2 | Clamp ring   |
| 15   | 0147 1326 03 |   |   | 2 | Bolt            | 38   | 1202 9077 00     |   |         | 1 | Flexible     |
| 16   |              |   |   |   | Clamp           | 39   | 0581 0000 47     |   |         | 2 | Coupling     |
|      | 1613 0802 00 |   |   | 2 | 2x13            | -    | 0584 2310 00     | • |         | 1 | Nut          |
|      | 1613 0803 02 |   |   | 3 | 8x13            | -    | 0584 0080 08     | • |         | 1 | Clamp ring   |
| 17   | 0333 3227 00 | 1 |   | 2 | Lock washer     | 40   | 0653 1046 00     |   | 1       | 2 | Gasket       |
| 18   | 0266 2110 00 |   |   | 7 | Nut             | 41   | 1202 9076 00     |   |         | 1 | Flexible     |
| 19   | 1202 9064 00 |   |   | 1 | Link            | 42   | 2253 3143 00     |   |         | 1 | Press. screw |
| 20   | 1202 9063 00 |   |   | 1 | Ball joint      |      |                  |   |         |   |              |
| 21   | 0333 3220 00 |   |   | 1 | Lock washer     | 1    | Kit 2910 3006 00 |   |         |   |              |
| 22   | 0266 2108 00 |   |   | 2 | Nut             | 2    | Kit 2910 3007 00 |   |         |   |              |
| 23   | 1619 1639 00 |   |   | 1 | Ball joint      | 3    | Kit 2910 3012 00 |   |         |   |              |
| 24   | ----         |   |   | 1 | Oil stop valve  | 4    | Kit 2910 3029 00 |   |         |   |              |
| 25   | 0147 1246 03 |   |   | 5 | Bolt            | 5    | Kit 2910 3035 00 |   |         |   |              |
| 26   | 0581 0000 52 |   |   | 1 | Coupling        |      |                  |   |         |   |              |
| -    | 0584 0080 08 | • |   | 1 | Clamp ring      |      |                  |   |         |   |              |
| -    | 0584 2310 00 | • |   | 1 | Nut             |      |                  |   |         |   |              |
| 27   | 0574 8122 01 |   |   | 1 | Flexible        |      |                  |   |         |   |              |
|      |              |   |   |   |                 |      | 26_186_0_0_0     |   |         |   |              |

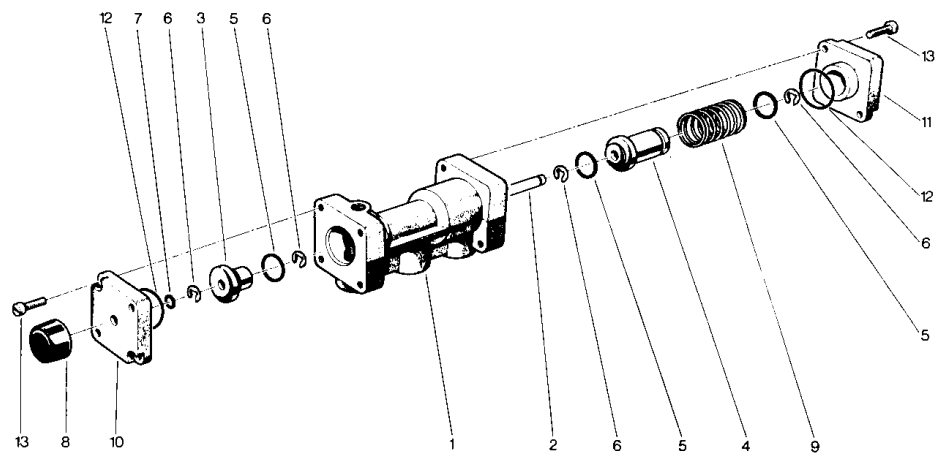
Unloading valve  
Ontlastventiel  
Avlastningsventil  
Entlastungsventil  
Soupape de décharge  
Válvula de descarga



| Ref. | A            | B  | C      | D | Designation        | Ref. | A                | B  | C      | D | Designation |
|------|--------------|----|--------|---|--------------------|------|------------------|----|--------|---|-------------|
| -    | 1614 4382 85 | •  | .....  | 1 | Unloading valve    | 10   | 1202 7391 00     | •  | 1..... | 1 | Gasket      |
| 1    | ***          | •  | .....  | 1 | Housing            | 11   | 1613 2399 00     | •  | .....  | 1 | Valve       |
| 2    | 1614 5062 00 | •  | .....  | 1 | Valve              | 12   | 0581 0028 00     | •  | .....  | 1 | Coupling    |
| -    | 1619 5531 00 | •  | 1..... | 1 | Seal ring          | -    | 0584 0314 00     | •• | .....  | 1 | Clamp ring  |
| 3    | ***          | •• | .....  | 1 | Ring               | -    | 0584 2314 00     | •• | .....  | 1 | Nut         |
|      |              |    |        |   | TFMA 70x68x7.3 -   | 13   | 0686 4201 00     | •  | .....  | 1 | Plug        |
|      |              |    |        |   | PTFE NBR Brons 552 | 14   | 0653 9038 00     | •  | 1..... | 1 | Gasket      |
| 4    | ***          | •• | .....  | 1 | O-ring             | 15   | 0653 1062 00     | •  | 1..... | 1 | Gasket      |
| 5    | 0147 1330 12 | •  | .....  | 2 | Bolt               |      |                  |    |        |   |             |
| 6    | 1613 3231 00 | •  | .....  | 1 | Spring             | 1    | Kit 2910 3035 00 |    |        |   |             |
| 7    | 1202 5004 00 | •  | .....  | 1 | Flange             |      |                  |    |        |   |             |
| 8    | 0147 1326 03 | •  | .....  | 2 | Bolt               |      |                  |    |        |   |             |
| 9    | 0301 2335 00 | •  | .....  | 4 | Washer             |      |                  |    |        |   |             |

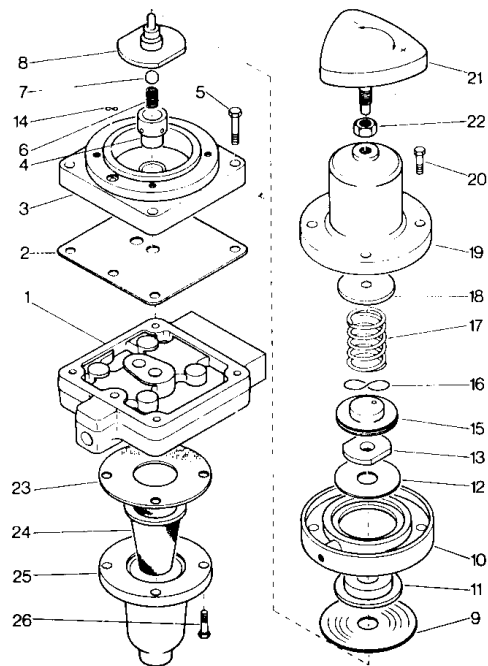


Loading valve  
Belastklep  
Pålastningsventil  
Belastungsventil  
Soupape de charge  
Válvula de carga

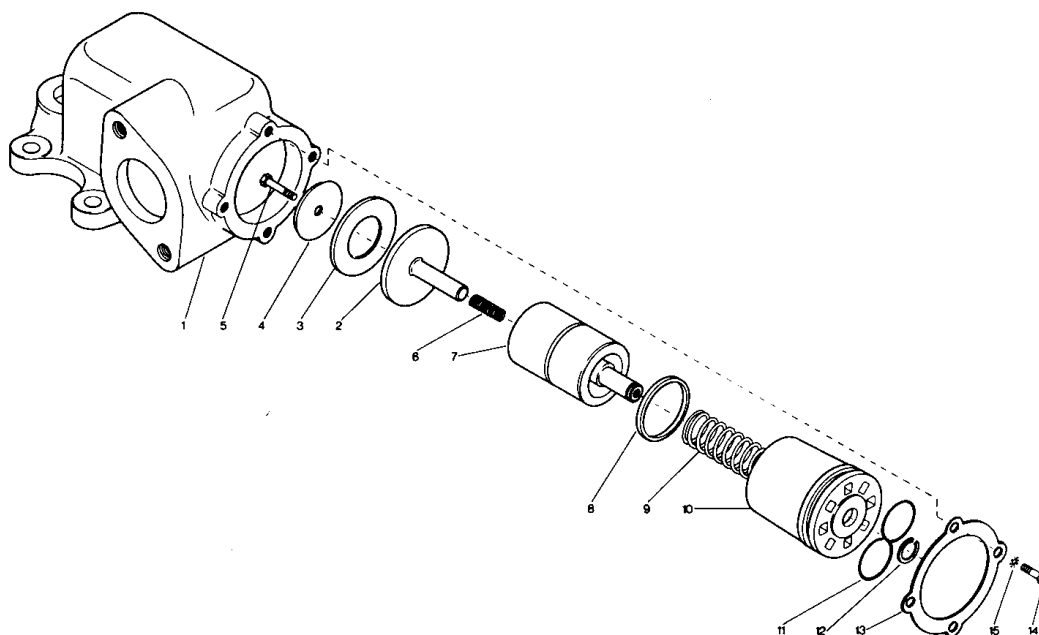


| Ref. | A            | B | C      | D | Designation   |
|------|--------------|---|--------|---|---------------|
| -    | 1613 2610 80 |   | .....  | 1 | Loading valve |
| 1    | .....        | • | .....  | 1 | Housing       |
| 2    | 1613 2610 00 | • | .....  | 1 | Rod           |
| 3    | 1613 2612 00 | • | .....  | 1 | Valve         |
| 4    | 1613 2613 00 | • | .....  | 1 | Valve         |
| 5    | 0663 3116 00 | • | 1..... | 3 | O-ring        |
| 6    | 0335 3106 00 | • | .....  | 4 | Circlip       |
| 7    | 0663 7110 00 | • | 1..... | 1 | O-ring        |
| 8    | 1613 2616 00 | • | .....  | 1 | Button        |
| 9    | 1613 3889 00 | • | .....  | 1 | Spring        |

| Ref.         | A                | B | C      | D | Designation |
|--------------|------------------|---|--------|---|-------------|
| 10           | 1613 2614 00     | • | .....  | 1 | Cover       |
| 11           | 1613 2615 00     | • | .....  | 1 | Cover       |
| 12           | 0663 7126 00     | • | 1..... | 2 | O-ring      |
| 13           | 0160 6060 00     | • | .....  | 4 | Screw       |
| 1            | Kit 2910 3007 00 |   |        |   |             |
| 22_017_0_0_5 |                  |   |        |   |             |

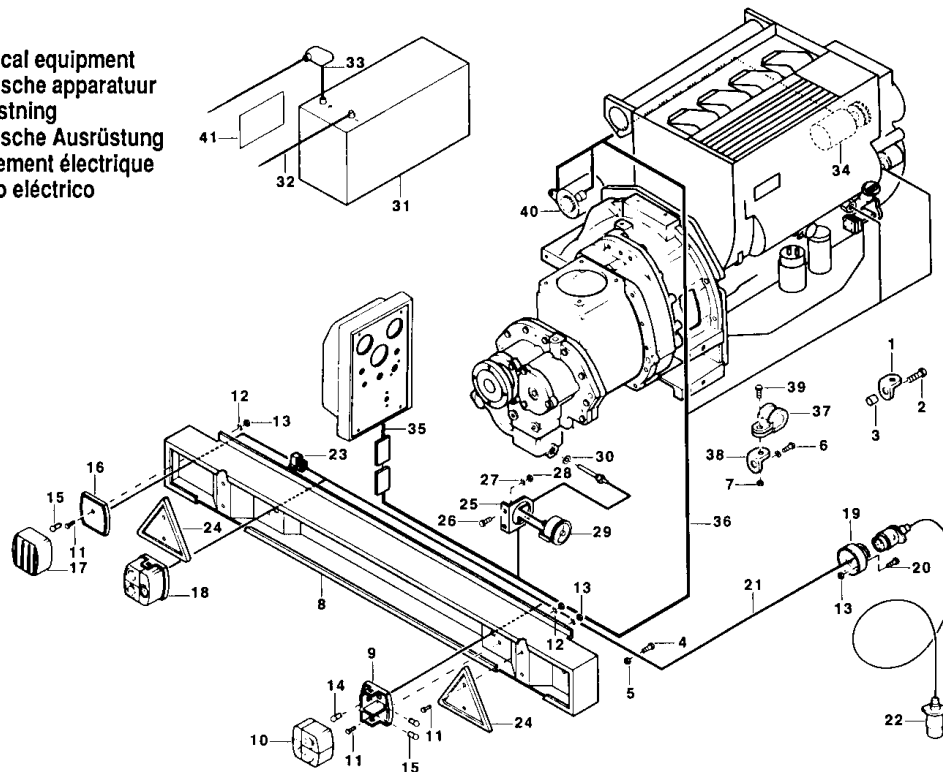


24\_002\_1



| Ref. | A            | B | C      | D | Designation            | Ref.         | A            | B | C      | D | Designation |
|------|--------------|---|--------|---|------------------------|--------------|--------------|---|--------|---|-------------|
| -    | 1613 3219 80 |   | .....  | 1 | Minimum pressure valve | 10           | 1613 2354 01 | • | .....  | 1 | Housing     |
| 1    | ***          | • | .....  | 1 | Housing                | 11           | 0663 7135 00 | • | 1..... | 1 | O-ring      |
| 2    | 1613 3221 00 | • | .....  | 1 | Valve                  | 12           | 0335 3111 00 | • | .....  | 1 | Circlip     |
| 3    | 1613 3223 01 | • | 1..... | 1 | Washer                 | 13           | 1613 3263 00 | • | .....  | 1 | Cover       |
| 4    | 1613 3222 00 | • | .....  | 1 | Washer                 | 14           | 0147 1246 03 | • | .....  | 4 | Bolt        |
| 5    | 0147 1244 03 | • | .....  | 1 | Bolt                   | 15           | 0333 3220 00 | • | 1..... | 4 | Lock washer |
| 6    | 1612 4049 00 | • | .....  | 1 | Spring                 |              |              |   |        |   |             |
| 7    | 1613 3220 00 | • | .....  | 1 | Piston                 | 1 Kit        | 2910 3029 00 |   |        |   |             |
| 8    | 1619 6928 00 | • | 1..... | 1 | Seal ring              |              |              |   |        |   |             |
| 9    | 1612 4048 00 | • | .....  | 1 | Spring                 | 22_035_0_2_2 |              |   |        |   |             |

Electrical equipment  
Elektrische apparatuur  
Elutrustning  
Elektrische Ausrüstung  
Équipement électrique  
Equipo eléctrico



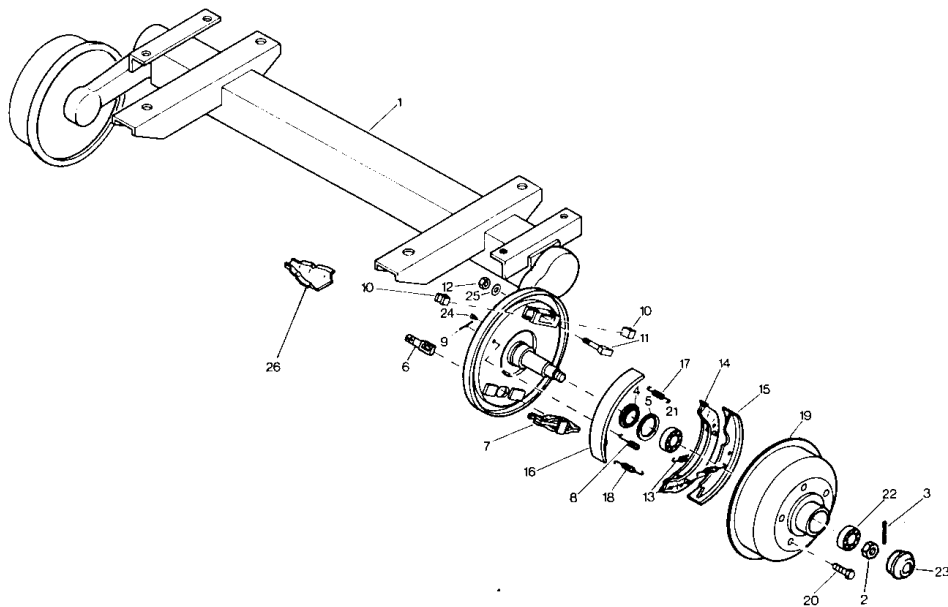
| Ref. | A            | B | C    | D  | Designation  |
|------|--------------|---|------|----|--------------|
| 1    | 2252 3808 00 |   |      | 1  | Bracket      |
| 2    | 0211 1438 00 |   |      | 1  | Screw        |
| 3    | 0324 1252 00 |   |      | 1  | Spacer       |
| 4    | 0160 6059 00 |   |      | 3  | Screw        |
| 5    | 0266 2107 00 |   |      | 3  | Nut          |
| 6    | 1619 2766 00 |   |      | 1  | Bolt         |
| 7    | 0266 2108 00 |   |      | 8  | Nut          |
| 8    | -            |   | 4)   | 1  | Bumper       |
| -    | 1619 5065 00 |   | 3/4) | 1  | Box          |
| 9    | ***          | • | 4)   | 1  | Base plate   |
| 10   | ***          | • | 4)   | 1  | Lens         |
| 11   | 0160 6062 00 |   | 4)   | 10 | Screw        |
| 12   | 0333 3215 00 |   | 4)   | 10 | Lock washer  |
| 13   | 0266 2107 00 |   | 4)   | 13 | Nut          |
| 14   | 1089 0364 01 |   | 4)   | 2  | Bulb         |
| 15   | 1089 0365 01 |   | 4)   | 5  | Bulb         |
| -    | 1619 6632 00 |   | 4)   | 1  | Fog lamp     |
| 16   | ***          | • | 4)   | 1  | Base plate   |
| 17   | ***          | • | 4)   | 1  | Lens         |
| 18   | 1619 5065 01 |   | 2/4) | 1  | Box          |
| 19   | 1089 0291 02 |   | 4)   | 1  | Socket       |
| 20   | 0160 6066 00 |   | 4)   | 3  | Screw        |
| 21   | 1614 4675 00 |   | 4)   | 1  | Wire harness |
| 22   | 1616 0864 00 |   | 4)   | 1  | Cable        |
| 23   | 1088 0830 09 |   | 4)   | 2  | Clamp        |
|      | 1088 0830 10 |   | 4)   | 9  | Clamp        |
| 24   | 1619 6677 00 |   | 4)   | 2  | Reflector    |
| 25   | 2252 4045 00 |   |      | 1  | Support      |
| 26   | 0147 1322 03 |   |      | 2  | Bolt         |
| 27   | 0333 3227 00 |   |      | 2  | Lock washer  |
| 28   | 0266 2110 00 |   |      | 2  | Nut          |
| 29   | 1089 0376 01 |   |      | 1  | Temp. switch |

| Ref. | A            | B  | C | D | Designation  |
|------|--------------|----|---|---|--------------|
| 30   | 0661 1033 00 |    |   | 1 | Gasket       |
| 31   | 0926 5093 00 |    |   | 1 | Battery      |
| 32   | 1613 1301 06 |    |   | 1 | Cable        |
| 33   | 2250 2382 48 |    |   | 1 | Cable        |
| 34   | ***          | 1) |   | 1 | Alternator   |
| 35   | 1202 5231 00 | 6) |   | 1 | Wire harness |
| 36   | 1202 8996 00 | 7) |   | 1 | Wire harness |
| 37   | 1613 0801 02 |    |   | 2 | Clamp        |
| 38   | 1613 0809 00 |    |   | 1 | Bracket      |
| 39   | 0147 1246 03 |    |   | 2 | Screw        |
| 40   | ***          | 1) |   | 1 | Starter      |
| 41   | 1614 5060 00 | 5) |   | 1 | Label        |

- 1) See "Engine, accessories and exhaust" / Zie "Motor, toebehoren en uitlaat" / Se "Motor, tillbehör och avgasjuddämpare" / Siehe "Motor, Zubehör und Auspuff" / Voir "Moteur, accessoires et échappement" / Véase "Motor, accesorios y escape"
- 2) L.H. / L / vänster / links / gauche / izquierdo
- 3) R.H. / R / höger / rechts / droite / derecho
- 4) Road signalisation / Signalisation / Signalanordning / Signalvorrichtung / Signalisation / Señalización
- 5) French version / Franse versie / Franskt utförande / Französische Ausführung / Version française / Versión francesa
- 6) Instrument panel / Instrumentenbord / Instrumentpanel / Armaturenboard / Tableau de bord / Panel de instrumentos
- 7) Compressor-engine / Kompressor-motor / Kompressor-motor / Kompressor-Motor / Compresseur-moteur / Compresor-motor

31\_086\_0\_0\_0

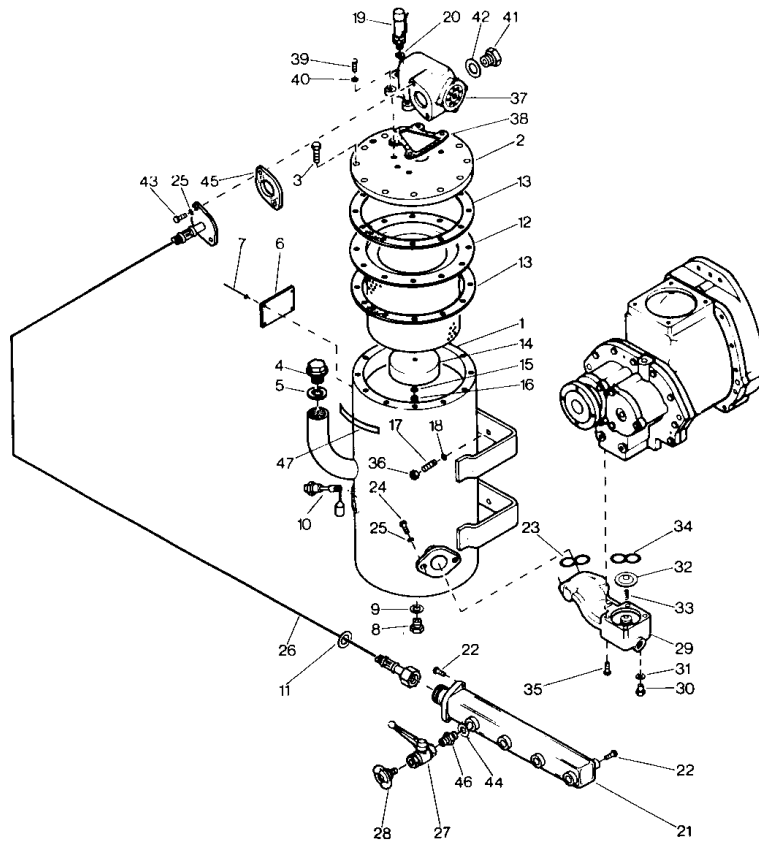
Axle  
As  
Axel  
Achse  
Essieu  
Eje



| Ref. | A            | B  | C     | D | Designation    |
|------|--------------|----|-------|---|----------------|
| -    | 1614 5099 00 | •  | ..... | 1 | Axle           |
| 1    | ***          | •  | ..... | 1 | Housing        |
| 2    | 1619 0164 00 | •  | ..... | 2 | Castled nut    |
| 3    | 0111 1375 00 | •  | ..... | 2 | Split pin      |
| 4    | 2900 0248 00 | •  | ..... | 2 | Seal ring      |
| 5    | 2900 0911 00 | •  | ..... | 2 | Seal ring      |
| 6    | 2900 0793 00 | •  | ..... | 2 | Shackle        |
| 7    | 2900 0794 00 | •  | ..... | 2 | Clasp          |
| 8    | 2900 0912 00 | •  | ..... | 2 | Spring         |
| 9    | 2900 0796 00 | •  | ..... | 2 | Hook           |
| 10   | 2900 0904 00 | •  | ..... | 4 | Abutment block |
| 11   | 2900 0901 00 | •  | ..... | 2 | Tightener      |
| 12   | 0291 1111 00 | •  | ..... | 2 | Nut            |
| -    | 2900 1016 00 | •  | ..... | 2 | Brake shoe     |
| 13   | 2900 0800 00 | •• | ..... | 2 | Spring         |
| 14   | ***          | •• | ..... | 1 | Retainer       |

| Ref. | A            | B  | C     | D  | Designation |
|------|--------------|----|-------|----|-------------|
| 15   | ***          | •• | ..... | 1  | Brake shoe  |
| 16   | 2900 1117 00 | •  | ..... | 2  | Brake shoe  |
| 17   | 2900 0905 00 | •  | ..... | 2  | Spring      |
| 18   | 2900 0906 00 | •  | ..... | 2  | Spring      |
| 19   | 2900 0915 00 | •  | ..... | 2  | Brake drum  |
| 20   | 2900 0900 00 | •  | ..... | 10 | Bolt        |
| 21   | 1619 2814 00 | •  | ..... | 2  | Bearing     |
| 22   | 0509 0105 00 | •  | ..... | 2  | Bearing     |
| 23   | 2900 0684 00 | •  | ..... | 2  | Cap         |
| 24   | 2900 0808 00 | •  | ..... | 2  | Plug        |
| 25   | 2900 0902 00 | •  | ..... | 2  | Washer      |
| 26   | 2900 1009 00 | •  | ..... | 2  | Retainer    |

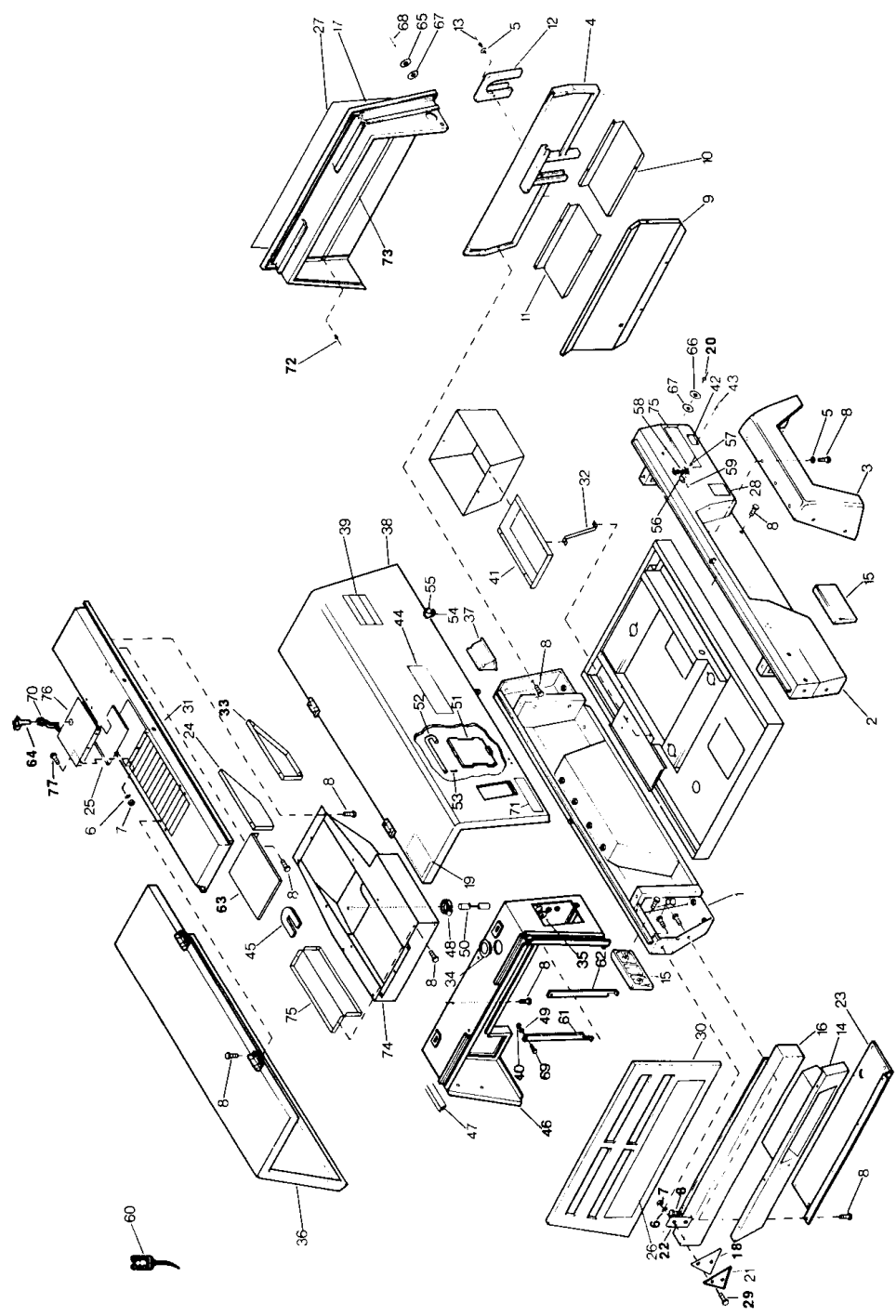
37\_032\_1\_0\_1



Air receiver and air outlet  
 Luchtketel en luchtuitlaat  
 Luftbehållare och luftutlopp  
 Luftbehälter und Luftauslaß  
 Réservoir d'air et sortie d'air  
 Depósito de aire y salida de aire

| Ref. | A            | B    | C   | D  | Designation  | Ref. | A                | B   | C | D | Designation      |
|------|--------------|------|-----|----|--------------|------|------------------|-----|---|---|------------------|
| -    | 1614 4265 80 |      | L   | 1  | Air receiver | 28   | 9000 0302 00     |     |   | 4 | Coupling         |
| 1    | •            | •    |     | 1  | Vessel       | -    | 9000 0000 00     | •   |   | 1 | Gasket           |
| 2    | 1616 2834 00 | •    |     | 1  | Cover        | 29   | 1614 4609 00     |     |   | 1 | Housing          |
| 3    | 0147 1403 03 | •    |     | 12 | Bolt         | 30   | 0686 4204 00     |     |   | 1 | Plug             |
| 4    | 2250 2528 00 | •    |     | 1  | Plug         | 31   | 0661 1033 00     | 1   |   | 1 | Gasket           |
| 5    | 0653 1227 00 | •    |     | 1  | Gasket       | 32   | 1202 6456 00     |     |   | 1 | Check valve      |
| 6    | 0690 3132 00 | •    | (L) | 1  | Data plate   | 33   | 1613 5165 00     |     |   | 1 | Spring           |
| 7    | 1619 1646 00 | •    |     | 4  | Rivet        | 34   | 0663 7138 00     | 3   |   | 1 | O-ring           |
| 8    | 0686 4206 00 | •    |     | 1  | Plug         | 35   | 0147 1373 03     |     |   | 4 | Bolt             |
| 9    | 0661 1038 00 | •    | 1   | 1  | Gasket       | 36   | 0266 2111 00     |     |   | 4 | Nut              |
| 10   | 1616 5108 00 |      |     | 1  | Oil gauge    | 37   | -- --            |     |   | 1 | Min. press. vlv. |
| 11   | 1202 8335 00 |      |     | 1  | Ring         | 38   | 1202 7000 00     | 1,2 |   | 1 | Gasket           |
| 12   | 1614 4373 00 |      |     | 1  | Element      | 39   | 0147 1363 03     |     |   | 4 | Bolt             |
| 13   | 1202 9341 00 | 1    |     | 2  | Gasket       | 40   | 0653 1046 00     | 1,2 |   | 4 | Gasket           |
|      | 1202 7392 00 | (An) |     | 2  | Gasket       | 41   | 0605 8828 05     |     |   | 1 | Reducer          |
| 14   | 1612 2607 00 |      |     | 1  | Cover        | 42   | 0653 1189 00     | 2   |   | 1 | Gasket           |
| 15   | 0301 2335 00 |      |     | 1  | Washer       | 43   | 0147 1402 03     |     |   | 2 | Bolt             |
| 16   | 0291 1110 00 |      |     | 1  | Lock nut     | 44   | 0653 1124 00     |     |   | 4 | Gasket           |
| 17   | 0246 1238 04 |      |     | 4  | Stud         | 45   | 1202 7001 00     | 2   |   | 1 | Gasket           |
| 18   | 0301 2344 00 |      |     | 4  | Washer       | 46   | 1612 4190 00     |     |   | 4 | Reducer          |
| 19   | 0830 2093 00 |      |     | 1  | Safety valve | 47   | 1079 9915 70     |     |   | 1 | Decal            |
| -    | 1619 3848 00 | •    |     | 1  | Hood         |      |                  |     |   |   |                  |
| 20   | 0653 1165 00 |      | 2   | 1  | Gasket       | 1    | Kit 2910 6005 00 |     |   |   |                  |
| 21   | 1614 5185 00 |      |     | 1  | Manifold     | 2    | Kit 2910 3029 00 |     |   |   |                  |
| 22   | 1619 2766 00 |      |     | 3  | Bolt         | 3    | Kit 2910 4046 00 |     |   |   |                  |
| 23   | 0663 7135 00 | 1    |     | 1  | O-ring       |      |                  |     |   |   |                  |
| 24   | 0147 1401 03 |      |     | 2  | Bolt         |      |                  |     |   |   |                  |
| 25   | 0333 3237 00 | 1,2  |     | 4  | Lock washer  |      |                  |     |   |   |                  |
| 26   | 1614 5054 00 |      |     | 1  | Flexible     |      |                  |     |   |   |                  |
| 27   | 1619 6153 05 |      |     | 4  | Valve        |      |                  |     |   |   |                  |

39\_151\_6\_1\_0





**Bodywork**  
**Karosserie**  
**Karosseri**  
**Karosserie**  
**Capotage**  
**Carroceria**

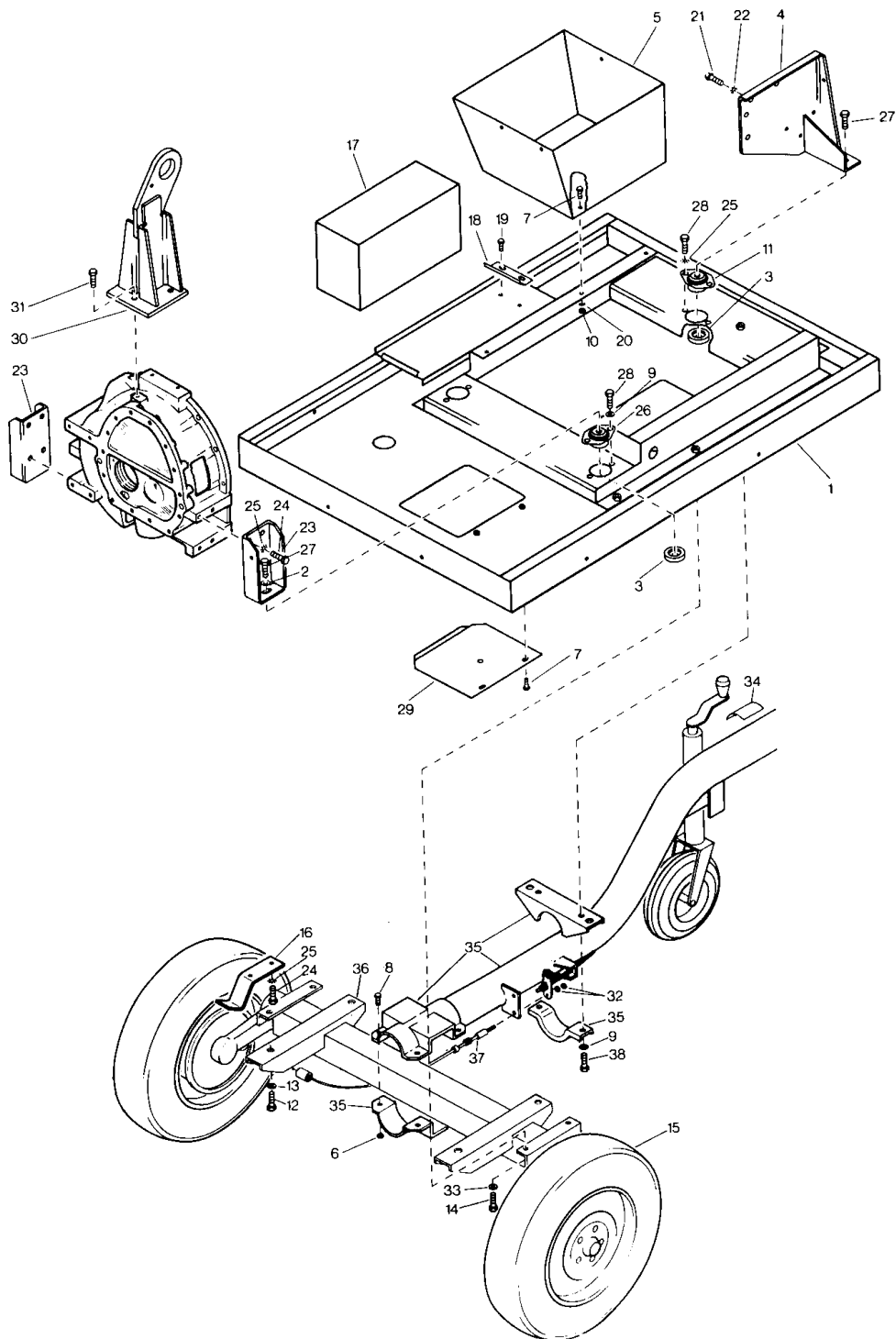
| Ref. | A            | B        | C  | D | Designation  |
|------|--------------|----------|----|---|--------------|
| 1    | 1202 9013 00 | 1) ..... | 1  |   | Side panel   |
| 2    | 1202 9014 00 | 1) ..... | 1  |   | Side panel   |
| 3    | 1614 4282 00 | .....    | 2  |   | Mudguard     |
| 4    | 1614 4283 00 | 1) ..... | 1  |   | Panel, lower |
| 5    |              | .....    | AR |   | Washer       |
|      | 0300 8005 00 | .....    |    |   | Ø 8.4        |
|      | 0301 2321 00 | .....    |    |   | Ø 6.3        |
|      | 0301 2335 00 | .....    |    |   | Ø 8.4        |
|      | 0333 3232 00 | .....    |    |   | Ø 10.5       |
| 6    |              | .....    | AR |   | Lock washer  |
|      | 0333 3215 00 | .....    |    |   | Ø 5.9        |
|      | 0333 3220 00 | .....    |    |   | Ø 6.4        |
|      | 0333 3227 00 | .....    |    |   | Ø 8.4        |
|      | 0333 3232 00 | .....    |    |   | Ø 10.5       |
| 7    |              | .....    | AR |   | Nut          |
|      | 0266 2107 00 | .....    |    |   | M5           |
|      | 0266 2108 00 | .....    |    |   | M6           |
|      | 0266 2110 00 | .....    |    |   | M8           |
|      | 0266 2111 00 | .....    |    |   | M10          |
| 8    |              | .....    | AR |   | Bolt         |
|      | 1619 2766 00 | .....    |    |   | M8x20        |
|      | 0226 0301 00 | .....    |    |   | M8x16        |
|      | 0147 1203 03 | .....    |    |   | M5x8         |
|      | 0147 1244 03 | .....    |    |   | M6x12        |
|      | 0147 1320 03 | .....    |    |   | M8x12        |
|      | 0147 1322 03 | .....    |    |   | M8x16        |
|      | 1619 5337 01 | .....    |    |   | M6x30        |
|      | 0147 1321 03 | .....    |    |   | M8x14        |
|      | 0147 1324 03 | .....    |    |   | M8x22        |
|      | 0147 1362 03 | .....    |    |   | M8x25        |
| 9    | 1202 9015 00 | 1) ..... | 1  |   | Baffle       |
| 10   | 1202 9017 00 | .....    | 1  |   | Bottom plate |
| 11   | 1202 9018 00 | .....    | 1  |   | Bottom plate |
| 12   | 1614 4367 00 | .....    | 1  |   | Guard        |
| 13   | 0129 3177 00 | .....    | 2  |   | Rivet        |
| 14   | 1614 4250 00 | 1) ..... | 1  |   | Panel, lower |
| 15   | 1614 4262 00 | .....    | 2  |   | Bumper       |
| 16   | 1614 4256 00 | .....    | 1  |   | Bumper       |
|      | 1202 9703 00 | 2) ..... | 1  |   | Bumper       |
| 17   | 1202 9018 00 | 1) ..... | 1  |   | Panel, front |
| 18   | 1202 9666 00 | 2) ..... | 2  |   | Plate        |
| 19   | 2920 1014 10 | 2) ..... | 1  |   | Decal        |
| 20   | 0129 3118 00 | 2) ..... | 4  |   | Rivet        |
| 21   | 1619 6677 00 | 2) ..... | 2  |   | Reflector    |
| 22   | 1612 2873 00 | .....    | 2  |   | Bracket      |
| 23   | 1614 4254 00 | .....    | 1  |   | Bottom plate |
| 24   | 1202 9058 00 | 3) ..... | 1  |   | Plate        |
| 25   | 1202 9032 00 | .....    | 1  |   | Plate        |
| 26   | 1202 9083 00 | .....    | 1  |   | Decal        |
| 27   | 1202 9084 00 | .....    | 1  |   | Decal        |
| 28   | 1613 5402 01 | .....    | 1  |   | Label        |
| 29   | 0160 6062 00 | .....    | 4  |   | Screw        |
| 30   | 1202 9022 00 | 1) ..... | 1  |   | Panel        |
| 31   | 1202 9025 00 | .....    | 1  |   | Roof         |
| 32   | 1202 9048 00 | .....    | 1  |   | Bracket      |
| 33   | 1202 9057 00 | 3) ..... | 1  |   | Plate        |
| 34   | 2250 9794 00 | .....    | 1  |   | Plug         |
| 35   | 1614 4607 00 | .....    | 1  |   | Plug         |
| 36   | 1202 9036 00 | 1) ..... | 1  |   | Door         |
| 37   | 1614 4378 00 | .....    | 4  |   | Handgrip     |

Ref. A B C D Designation

|    |                |          |    |  |             |
|----|----------------|----------|----|--|-------------|
| 38 | 1614 4303 00   | 1) ..... | 1  |  | Door        |
| 39 | 0690 1132 00   | .....    | 2  |  | Firm plate  |
| 40 |                | .....    |    |  | Lock nut    |
|    | 0291 1108 00   | .....    | AR |  | M6 Nyloc    |
|    | 0291 1110 00   | .....    | 4  |  | M8 Nyloc    |
| 41 | 1202 9047 00   | .....    | 1  |  | Cover       |
| 42 | 1614 4695 00   | .....    | 1  |  | Data plate  |
|    | 1614 4694 00   | 2) ..... | 1  |  | Data plate  |
| 43 | 0129 3103 00   | .....    | 4  |  | Pop rivet   |
| 44 |                | .....    | 2  |  | Decal       |
|    | 2254 0854 32   | .....    |    |  | XA75        |
|    | 2254 0854 19   | .....    |    |  | XAS75       |
| 45 | 1202 9070 00   | .....    | 1  |  | Grommet     |
| 46 | 1614 4295 00   | 1) ..... | 1  |  | Panel, rear |
| 47 | 1619 2665 00   | .....    | AR |  | Seal        |
| 48 | 0347 6105 00   | .....    | 1  |  | Clamp       |
| 49 | 1612 3046 00   | .....    | 2  |  | Ring        |
| 50 | 0099 9910 30   | .....    | AR |  | Hose        |
| 51 | 1614 4364 00   | .....    | 1  |  | Screen      |
| 52 | 1614 4362 00   | .....    | 1  |  | Lock        |
| 53 | 0108 1149 00   | .....    | 1  |  | Elastic pin |
| 54 | 1613 2666 00   | .....    | 4  |  | Stirrup     |
| 55 | 0129 3172 01   | .....    | 8  |  | Pop rivet   |
| 56 | 1619 2980 01   | .....    | 4  |  | Base plate  |
| 57 | 0129 3174 01   | .....    | 12 |  | Pop rivet   |
| 58 | 1619 2978 01   | .....    | 4  |  | Catch       |
| 59 | 1619 2981 01   | .....    | 4  |  | Pin         |
| 60 | 1202 5211 00   | .....    | AR |  | Seal        |
|    | - 1619 1200 00 | .....    | 1  |  | Padlock     |
| 61 | 1614 4286 00   | .....    | 1  |  | Stay        |
| 62 | 1614 4286 01   | .....    | 1  |  | Stay        |
| 63 | 1202 9031 00   | 3) ..... | 1  |  | Plate       |
| 64 | 1089 9068 01   | .....    | 1  |  | Key         |
| 65 | 1619 6634 00   | 2) ..... | 2  |  | Reflector   |
| 66 | 1619 6634 01   | 2) ..... | 4  |  | Reflector   |
| 67 | 1614 4622 00   | 2) ..... | 6  |  | Spacer      |
| 68 | 0129 3110 00   | 2) ..... | 2  |  | Rivet       |
| 69 | 0216 1247 03   | .....    | 2  |  | Screw       |
| 70 | 1202 9082 00   | .....    | 1  |  | Lock        |
| 71 | 1079 9906 01   | .....    | 2  |  | Decal       |
| 72 | 0129 3172 00   | .....    | 2  |  | Rivet       |
| 73 | 1613 1233 19   | .....    | 1  |  | Strip       |
| 74 | 1202 9055 00   | 3) ..... | 1  |  | Duct        |
| 75 | 1202 9056 00   | .....    | 1  |  | Plate       |
| 76 | 1202 9033 00   | 3) ..... | 1  |  | Door        |
| 77 | 0162 4246 00   | .....    | 3  |  | Screw       |

- 1) For XAS version, to be lined with self-adhesive foam plastic /  
 Voor XAS versie, te bekleden met zelfklevend schuimrubber /  
 För XAS utförande, skall kläs med självklistrande skumplast /  
 Für XAS Ausführung, auskleiden mit selbstklebendem  
 Schaumgummi / Pour la version XAS, à garnir avec du  
 caoutchouc mousse autocollant / Para versión XAS, revestir de  
 goma espuma autoadhesiva
- 2) British version / Engelse versie / Engelskt utförande / Englische  
 Ausführung / Version anglaise / Versión inglesa
- 3) To be lined with mineral wool / Te bekleden met rotswool / Skall  
 kläs med mineralull / Auskleiden mit Rockwool / A garnir avec de  
 la laine minérale / Revestir de lana mineral  
 1619 2112 00 (AR)

40\_206\_0\_0\_0



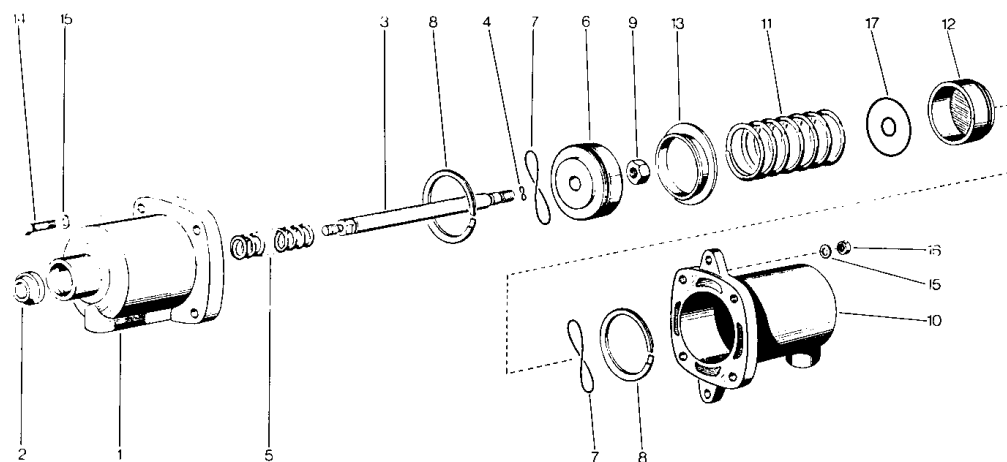
Frame  
 Frame  
 Ram  
 Rahmen  
 Châssis  
 Bastidor

| Ref. | A            | B  | C | D | Designation       | Ref. | A            | B  | C | D  | Designation     |
|------|--------------|----|---|---|-------------------|------|--------------|----|---|----|-----------------|
| 1    | 1202 9008 00 |    |   | 1 | Frame             | 23   | 1202 9005 00 |    |   | 2  | Bracket         |
| 2    | 1202 9007 00 |    |   | 3 | Spacer            | 24   | 0147 1362 03 |    |   | 12 | Bolt            |
| 3    | 1202 9081 00 |    |   | 3 | Limitation disk   | 25   | 0333 3232 00 |    |   | 19 | Lock washer     |
| 4    | 1202 9045 00 |    |   | 1 | Support           | 26   | 1202 9006 00 |    |   | 2  | Buffer          |
| 5    | 1202 9046 00 |    |   | 1 | Toolbox           | 27   | 0147 1410 15 |    |   | 3  | Bolt            |
| 6    | 0291 1112 00 |    |   | 4 | Lock nut          | 28   | 0211 1360 03 |    |   | 6  | Bolt            |
| 7    | 1619 2766 00 |    |   | 6 | Bolt              | 29   | 1202 9010 00 |    |   | 2  | Plate           |
|      | 0147 1322 03 |    |   | 1 | Bolt              | 30   | 1202 9012 00 |    |   | 1  | Lifting eye     |
| 8    | 0147 1401 03 |    |   | 4 | Bolt              | 31   | 0147 1439 03 |    |   | 3  | Bolt            |
| 9    | 0301 2358 00 |    |   | 4 | Washer            | 32   | 0266 2110 00 |    |   | 4  | Nut             |
| 10   | 0266 2110 00 |    |   | 1 | Nut               | 33   | 0301 2358 00 |    |   | 2  | Washer          |
| 11   | 1202 9006 02 |    |   | 1 | Antivibration pad | 34   | 1079 9902 00 |    |   | 1  | Label           |
| 12   | 0147 1475 15 |    |   | 4 | Bolt              | 35   |              |    |   | 1  | Towbar          |
| 13   | 0301 2378 00 |    |   | 4 | Washer            |      | 1202 9355 82 |    |   |    | Swivel A.C. eye |
| 14   | 0147 1400 15 |    |   | 4 | Bolt              |      | 1202 9359 82 |    |   |    | Swivel 30mm eye |
| 15   | 0538 0400 04 | 2) |   | 2 | Tyre              | 36   | ---          |    |   | 1  | Axle            |
|      | 0538 0483 00 |    |   | 2 | Tyre              | 37   | 1615 4778 03 |    |   | 2  | Brake cable     |
| -    | 1614 4348 00 | 2) |   | 2 | Disc wheel        | 38   | 0147 1411 15 |    |   | 2  | Bolt            |
|      | 1615 4777 00 |    |   | 2 | Disc wheel        |      | 0147 1409 15 | 4) |   | 2  | Bolt            |
| -    | 0538 3200 02 | 2) |   | 2 | Inner tube        |      |              |    |   |    |                 |
|      | 0538 3263 00 |    |   | 2 | Inner tube        |      |              |    |   |    |                 |
| 16   | 1614 4294 00 |    |   | 2 | Bracket           |      |              |    |   |    |                 |
| 17   | ----         | 1) |   | 1 | Battery           |      |              |    |   |    |                 |
| 18   | 1202 9011 00 |    |   | 1 | Clamp             |      |              |    |   |    |                 |
| 19   | 1619 2766 00 |    |   | 2 | Bolt              |      |              |    |   |    |                 |
| 20   | 0333 3227 00 |    |   | 1 | Lock washer       |      |              |    |   |    |                 |
| 21   | 0147 1437 03 |    |   | 4 | Bolt              |      |              |    |   |    |                 |
| 22   | 0333 3242 00 |    |   | 4 | Lock washer       |      |              |    |   |    |                 |

1) See "Electrical equipment" / Zie "Elektrische apparatuur" / Se  
 "Elutrustning" / Siehe "Elektrische Ausrüstung" / Voir  
 "Equipment électrique" / Véase "Equipo eléctrico"

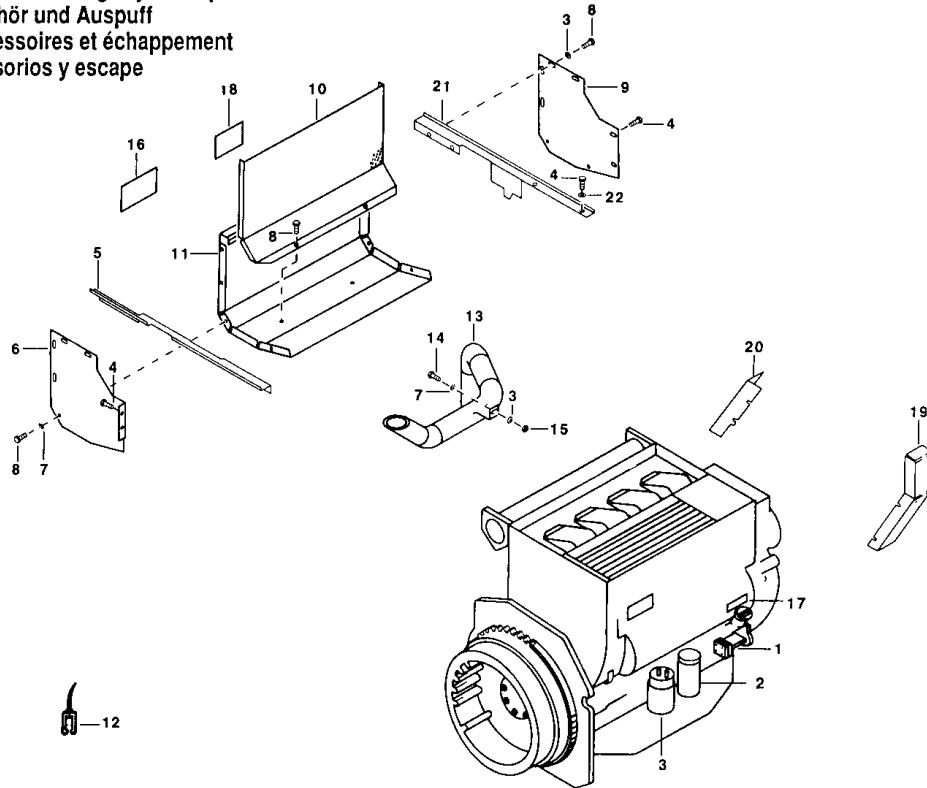
2) XAS 75 Dd

34\_072\_0\_1\_0



1 Kit 2910 3006 00

Engine, accessories and exhaust  
 Motor, toebehoren en uitlaat  
 Motor, tillbehör och avgasjuddämpare  
 Motor, Zubehör und Auspuff  
 Moteur, accessoires et échappement  
 Motor, accesorios y escape



| Ref. | A            | B  | C | D  | Designation                        | Ref.                                                                                                                                                                                   | A            | B  | C | D | Designation |
|------|--------------|----|---|----|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----|---|---|-------------|
| 1    | 1202 9001 00 |    |   | 1  | Engine<br>Deutz F4L 1011 -<br>38Kw | 17                                                                                                                                                                                     | 1079 9915 80 |    |   | 1 | Label       |
| 2    | 1202 8497 00 | •  |   | 1  | Oil filter element                 | 18                                                                                                                                                                                     | 1614 5060 00 | 2) |   | 1 | Label       |
| 3    | 2900 0687 00 | •  |   | 1  | Fuel filter element                | 19                                                                                                                                                                                     | 1202 9065 00 |    |   | 1 | Guard       |
| 4    | 0147 1244 03 |    |   | 7  | Bolt                               | 20                                                                                                                                                                                     | 1202 9066 00 |    |   | 1 | Guard       |
| 5    | 1202 9039 00 |    |   | 1  | Plate                              | 21                                                                                                                                                                                     | 1202 9038 00 |    |   | 1 | Plate       |
| 6    | 1202 9040 00 |    |   | 1  | Plate                              | 22                                                                                                                                                                                     | 0301 2321 00 |    |   | 6 | Washer      |
| 7    | 0333 3220 00 |    |   | 3  | Lockwasher                         | 1) To be lined with mineral wool / Te bekleden met rotswol / Skall<br>kläs med mineralull / Auskleiden mit Rockwool / A garnir avec de<br>la laine minérale / Revestir de lana mineral |              |    |   |   |             |
| 8    | 1619 2766 00 |    |   | 13 | Bolt                               |                                                                                                                                                                                        |              |    |   |   |             |
| 9    | 1202 9041 00 |    |   | 1  | Plate                              | 2) French version / Franse versie / Franskt utförande /<br>Französische Ausführung / Version française / Versión francesa                                                              |              |    |   |   |             |
| 10   | 1202 9043 00 | 1) |   | 1  | Plate                              |                                                                                                                                                                                        |              |    |   |   |             |
| 11   | 1202 9042 00 |    |   | 1  | Baffle                             | 1_082_1_0_0                                                                                                                                                                            |              |    |   |   |             |
| 12   | 1202 5211 00 |    |   | AR | Seal                               |                                                                                                                                                                                        |              |    |   |   |             |
| 13   | 1202 9044 00 |    |   | 1  | Exhaust pipe                       |                                                                                                                                                                                        |              |    |   |   |             |
| 14   | 0147 1250 03 |    |   | 1  | Bolt                               |                                                                                                                                                                                        |              |    |   |   |             |
| 15   | 0266 2108 00 |    |   | 1  | Nut                                |                                                                                                                                                                                        |              |    |   |   |             |
| 16   |              |    |   | 1  | Label                              |                                                                                                                                                                                        |              |    |   |   |             |
|      | 2250 9263 00 |    |   |    | English                            |                                                                                                                                                                                        |              |    |   |   |             |
|      | 1079 9902 22 |    |   |    | Dutch                              |                                                                                                                                                                                        |              |    |   |   |             |
|      | 1079 9902 23 |    |   |    | Swedish                            |                                                                                                                                                                                        |              |    |   |   |             |
|      | 1079 9902 24 |    |   |    | German                             |                                                                                                                                                                                        |              |    |   |   |             |
|      | 1079 9902 25 |    |   |    | French                             |                                                                                                                                                                                        |              |    |   |   |             |
|      | 1079 9902 27 |    |   |    | Italian                            |                                                                                                                                                                                        |              |    |   |   |             |

Contents "Service kits"  
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| A                | C  | D | A                | C  | D |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------|----|---|------------------|----|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Kit 2910 0155 20 |    | 1 | Kit 2910 3035 00 |    | 1 | 1) Parts needed to overhaul the respective sub-assembly, all other parts of the kit to be used for mounting the sub-assembly into the unit / Komponenten nodig voor de revisie van het respectievelijke onderdeel; alle andere componenten van de kit gebruiken om het onderdeel in de groep te monteren / Delar som behövs till ifrågavarande komponentens översyn; alla andra delar i "service kit" skall användas till montering av komponenten i aggregatet / Komponentens nötig um die respektive Baueinheit zu überholen, alle anderen Komponenten vom "Service Kit" sind zu verwenden um die Baueinheit in die Gruppe einzubauen / Pièces nécessaires pour la révision du composant respectif; utiliser toutes les autres pièces du kit pour la pose du composant dans le groupe. / Piezas necesarias para la revisión del subconjunto respectivo; utilizar todas las otras piezas del "kit" para montar el subconjunto en el grupo |
| 0663 7141 00     |    | 3 | 0653 1046 00     |    | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 1613 2200 00     |    | 1 | 0653 1062 00     | 1) | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 1619 3857 00     |    | 2 | 0653 9038 00     | 1) | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                  |    |   | 1613 2363 00     |    | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Kit 2910 3006 00 |    | 1 | 1616 2398 00     | 1) | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0333 3227 00     |    | 2 | 1619 5531 00     | 1) | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0653 1046 00     |    | 2 |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0663 2131 00     | 1) | 2 | Kit 2910 4046 00 |    | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0663 7512 00     | 1) | 1 | 0653 1062 00     |    | 2 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0665 9109 00     | 1) | 1 | 0663 3120 00     |    | 1 | 48_086_0_0_5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 2250 5875 00     | 1) | 2 | 0663 7135 00     |    | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                  |    |   | 0663 7138 00     |    | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Kit 2910 3007 00 |    | 1 | 1202 7016 00     |    | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0653 1046 00     |    | 2 | 1613 2363 00     |    | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0653 1062 00     |    | 3 |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0663 3116 00     | 1) | 3 | Kit 2910 6005 00 |    | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0663 7110 00     | 1) | 1 | 0333 3237 00     |    | 2 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0663 7126 00     | 1) | 2 | 0653 1046 00     |    | 4 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                  |    |   | 0653 1062 00     |    | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Kit 2910 3009 00 |    | 1 | 0661 1033 00     |    | 1 | " SERVICE PAK "                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0661 1033 00     | 1) | 1 | 0661 1038 00     |    | 2 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0661 1049 00     | 1) | 2 | 0663 7135 00     |    | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0663 3120 00     |    | 1 | 1613 2349 00     |    | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0663 7135 00     |    | 1 | 1616 2835 00     | 1) | 2 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                  |    |   |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Kit 2910 3012 00 |    | 1 |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0653 1062 00     |    | 2 |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0663 3132 00     | 1) | 1 |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0663 6112 00     | 1) | 1 |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 1012 0356 00     | 1) | 1 |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 2250 5842 00     | 1) | 1 |                  |    |   | MAINTENANCE KITS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 2250 5843 00     | 1) | 1 |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 2250 5847 01     | 1) | 1 |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 2250 5850 00     | 1) | 1 |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                  |    |   |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Kit 2910 3029 00 |    | 1 |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0333 3220 00     | 1) | 4 |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0333 3237 00     |    | 2 |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0653 1046 00     |    | 4 |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0653 1062 00     |    | 1 |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0653 1100 00     |    | 1 |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0653 1165 00     |    | 1 |                  |    |   | 500 HRS 2905 0599 02<br>1000 HRS 2905 0599 03                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 0653 1189 00     |    | 1 |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0663 7135 00     | 1) | 1 |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 1613 2349 00     |    | 1 |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 1613 3223 01     | 1) | 1 |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 1615 2683 00     |    | 2 |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 1619 6928 00     | 1) | 1 |                  |    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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